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THEME OF THIS ISSUE

Explorations in Reading Research

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The Reading Teacher

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Let's Face It

TEACHERS who, for many years, have been concerned about the confusion in research dealing with teaching reading will be heartened to know that something is being done about it. More important, the problem is being seriously examined by experts in the field without the wave of criticism that usually drives educators to such considerations."

Thus wrote Helen Robinson in the May, 1960, issue of the *Elementary School Journal*.

Thomas Horn, President of the National Conference on Research in English in 1958, appointed several committees to examine the problems evident in producing, publishing, and interpreting research in reading. This initiating action was pursued by Ralph Staiger, president of the organization in 1959. He appointed William Sheldon general chairman of the three research committees.

Sheldon, working through the Carnegie Corporation of New York, obtained funds permitting the bringing together of committee members for a conference on research in reading. The group met in Syracuse, New York, in October, 1959.

This year, through the efforts of Helen Robinson, the Reading Research Committee met in Chicago under the sponsorship of the William S. Gray Research Fund. The twenty-five people involved were organized into four groups: (1) Utilization of

Research, chaired by Guy Bond; (2) Needed Research, by Russell Stauffer; (3) Research Designs, by David Russell; (4) Cooperative Research, by William Sheldon. This meeting resulted in steps to develop a nation-wide cooperative research project in the area of beginning reading instruction.

Through the U. S. Office of Education a descriptive bibliography of unpublished research is being prepared. During the year a number of research meetings, co-sponsored by the NCRE, will be held.

Those who participated in the Syracuse and Chicago meetings are facing squarely the need for research. Especially praiseworthy is the fact that all recognize the necessity for coordinated research. Individual efforts, while good, are not enough. All are dedicated to the proposition that the youth of our land need to reap the benefits that can result from quality research done on a large-scale basis.

It may be that in the next few years many teachers across the country will be called upon to participate in controlled research programs. It is felt that, when the call goes out, teachers will face the demands as squarely as this committee has done. In so many ways this issue of **THE READING TEACHER** devoted to research indicates to all IRA members the importance of research for good teaching.—R. G. S.

Differences in Reading Instruction In English-Speaking Countries

by GUY L. BOND

THREE ARE more similarities than differences in reading instruction in various English-speaking countries. The universality of some phases of reading instruction indicates methods that should be maintained. The differences in reading instruction indicate procedures that should be explored by research. The following differences between reading instruction in other English-speaking countries and in the United States give rise to questions which warrant careful research in order to explore possible ways of improving our teaching of reading.

When should reading instruction begin? In New Zealand, England and Scotland, children are started in organized reading instruction earlier than they are in some parts of Australia and the United States. In the former group of countries the children enter school at five years of age and are given a prolonged pre-reading program—much in the form of our kindergarten instruction but more specifically directed toward developing the necessary prerequisites to systematic reading instruction. Then, after three to six months of this pre-reading program, which includes some experience with reading activities, the children are started in the organized, basic instructional reading program. In some parts of Australia and in America, children enter the first grade at approximately

six years of age and after two to six weeks of readiness instruction embark on the systematic, basic reading program.

Our studies have shown that there are many factors related to success in learning to read, and that age and mental capability desirable for beginning to learn to read depend in no small measure on how the reading is taught. Studies tend to indicate that the time at which we should start reading instruction should be determined by whether the outcomes are educationally, economically, and socially most worthwhile. We can modify our reading programs to fit the children we teach, but the less mature the child, the more individual attention he will need. Our studies show the time that the average child should start formal reading instruction in the typical program, but we need studies to indicate the time at which the exceptionally able child should start to read.

Are our promotional policies wise? There is a marked difference in promotional policies in the various countries I have visited. In New Zealand, for example, the child can enter school when he becomes five years old, at whatever time of the year this event happens to take place.

Obviously, classes in the first grade would become increasingly large without a chance to promote a child to the second grade at any time

during the year. This is exactly what happens in New Zealand. However, there is also the problem of the probationary teacher, a teacher with less than two years of teaching experience, who may not teach more than thirty-five children. If a probationary teacher happens to be teaching in the second grade and has her quota of thirty-five children, the first-grade teacher cannot promote any more children to the second grade until some in the second grade move up. Before a first-grade teacher promotes a child to the second grade, the child must have covered a certain amount of reading material and must have achieved a certain amount of ability in reading. This makes the teacher a keen student of each child's reading capability.

I don't believe that we should emulate this promotional policy, but I believe that there is need for us to study carefully our promotional policies to see if we have gone too far in continuous promotion and whether we are making appropriate adjustments to the child with immature reading ability and the child with superior reading ability in succeeding classes.

The problem really involves more complete research in adjustments to individual differences, using new types of material, new organization in the classroom, as well as the study of promotional policies.

Do we devote enough time to primary reading? More time and emphasis is devoted to reading and reading instruction in the early grades in other English-speaking

countries than is given to reading instruction in America. Could it be that our emphasis on the social studies in the early grades, before the child has the reading skills necessary to use print as an aid to learning and before he has the background necessary to interpret the complex ideas is wrong? Instead, should we put the emphasis on the systematic program of reading instruction for the first three years, as is done in the other countries, rather than having the program social-studies centered?

Do we have a balanced reading program? The other countries, in their rejection of isolated phonetics as the most desirable approach to reading instruction, have avoided falling into the error of thinking that reading is discovered by chance or in an incidental way while doing independent reading. The teachers in the other countries use to a greater degree basic reading texts; they read the manuals that accompany them, and do what the manuals suggest.

Some educators in America are not aware of the complexities involved in learning to read, and they hope that learning to read may be the fortunate result of a stimulating environment. I should like to see some studies made, testing a blend between the two points of view, namely, a stimulating environment built into the reading programs and radiating out from them, rather than a reading program which is considered an unwanted although somewhat necessary evil accompanying an experience curriculum.

Should parents help with reading

instruction? The correspondence course developed by the Correspondence School, Blackfriars, Sydney, demonstrates material that is to be used by the parents in helping the child learn to read. The detailed *Guide for the Home Supervisor* illustrates the care with which such material must be made. Many parents wish to help their children to learn to read, but they do not know how to help and, therefore, they often give instruction that is detrimental to the child's reading growth. The American point of view has been that systematic instruction in reading should be left entirely to the school. This point of view could well be tested.

There is a way of handling this problem that might be more fortunate for the child-parent-school relationship. A program of supplementary home-study material could be developed wherein the parents could give children individual help with some phases of the reading program. The children would be getting additional practice in important skills, and such material would show the parents that the school is concerned about skill development in reading. Other children who find instruction at school insufficient to establish these skills could receive individual attention at home.

If the program were carefully constructed, it might prove beneficial to the child, to the parents' desire to help, and to public understanding of the reading program and school in general. Then uninformed and unfortunate cure-alls would not be so

readily accepted by parents and the public in the search for a simple solution to a complex problem. Such a program could be easily developed and research conducted in order to test its influence on the growth of reading, its effect on the child, its acceptance by the parents, and its over-all educational worth.

Is there too much material in the basic program? In all the other countries in which I studied reading instruction, approximately 300 words were introduced in the first-year reading program rather than the 350 to 400 words introduced in America. Only about half as many pages of print are used to teach the systematic basic program. Could it be that we have so burdened the teachers with "book mileage" that they do not have time to teach systematically the skills and abilities the program is designed to teach?

In the past twenty years we have added book after book to the program in the hope that the child, while going through the material would discover the ways to read. Maybe it would be better if the American books were re-organized in such a way as to use only half the number of pages for instructional purposes.

This would be a very interesting and easy bit of research to conduct and might prove to be a substantial contribution to reading instruction. All that would be entailed would be to take the first-grade program of a current basic series of readers and use every other story or selection for instructional purposes, and use the

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remaining ones for independent reading. The teachers would be encouraged to use the manuals and the exercises suggested in the manuals. They would have approximately twice as much time in which to develop the skills and abilities for the groups within the classrooms. This does not mean that the children would read less, but that the teachers would be able to teach those selections used for group work exceedingly well, since they would have ample time in which to attend to the procedures for each selection.

Can supplementary devices make reading meaningful? In the other English-speaking countries, extensive use is made of devices to be used by the children independently. The devices include: matching words together which have similar parts, such as *street* and *string*, to show the child how words may be recognized; matching words and phrases with pictures; assembling jig-saw puzzle stories so that when turned over, if done correctly, they can see the picture of a story assembled. I believe that it might be possible to develop, from among many such devices, some which give the child a meaningful understanding of reading and the skills and abilities involved. In the field of arithmetic, devices of this sort are used to show the meaningful nature of arithmetic. It might be interesting to try out the effectiveness of some such instructional aids in reading.

Would more writing foster reading growth? In all the other English-speaking countries I visited, writing

is used in connection with reading instruction more than it is in America. Every child from the first grade through the sixth kept a diary of important daily occurrences. In the first grade the diary was composed of simple statements. In the higher grades the diaries were rather complete. At first, much of the writing was copy work. At the start this work was limited to words and phrases, but shortly thereafter whole pages from the preprimers were copied.

The question in my mind is, how effective are such writing activities accompanying reading instruction? There is little doubt that something written is remembered longer by the writer. Could it be that such an approach would add to our efficiency in teaching reading? On the other hand, could it be that copy work would limit creative writing? Many teachers of reading in the other countries were convinced of its importance as an aid to instruction.

Are more special services needed? In all the countries I visited, there were programs to help the disabled reader just as there are here. They used different names for the teachers, but the programs were similar. In Australia there were remedial reading teachers and reading clinics. In England there were peripatetic teachers for reading retardates, and there were recommendations that many more were needed. In Scotland they had adjustment teachers who were in charge of classes "in which modern remedial methods are used to adjust each child's attainments to his ability."

I believe that we could well afford to look at the Scottish system in this regard. In Edinburgh alone there are fifty-one full-time adjustment teachers who give remedial instruction to those children who are in learning difficulties. About 80 per cent of the time of these adjustment teachers is concerned with reading or reading-associated problems. This is a school system that has only seventy-two elementary schools. In addition to these adjustment teachers, Edinburgh has nineteen special schools for mentally and physically handicapped children; there is also a child guidance service with one head psychologist, one assistant in charge of adjustment teacher services, two social workers, and three secretaries.

This is not all of the service available to the children and teachers of Edinburgh. By law, if there are more than five teachers in an infant school, there is an infant mistress who has no class assignments, but who teaches each class once a week in order to locate children in need of individual help with their reading or other learnings (but mainly reading because this is what they are emphasizing in the first two grades). She then gives these children the help they need the rest of the week, either individually or in small groups. In this way minor confusions can be corrected before they become major disabilities. There are forty-two out of

the seventy-two schools in Edinburgh that have this service. In the other schools in Edinburgh there is an infant mistress who is relieved once a week to work with children who need special attention. We should explore the effectiveness of such services in fostering maximum reading growth for all children.

These are but a few of the areas of research which may be isolated by a comparative study of reading instruction in English-speaking countries. Continuous interchanges of ideas, tested by research, would improve reading instruction everywhere.

(*Dr. Bond is Chairman of the Department of Elementary Education at the University of Minnesota. He is the author of a number of textbooks in the field of reading.*)

EDITOR'S COMMENT

Professor Bond's article based on a world tour a few years ago points out a number of significant problems which merit careful attention by university research workers and also by classroom teachers — for informal classroom experimentation may provide promising leads for more sophisticated and more carefully controlled research.

This article by outlining an important series of questions should serve as a means of stimulating discussion and research to improve American reading instruction.—T.C.

Dr. Theodore Clymer, Professor of Education at the University of Minnesota and Chairman of the Studies and Research Committee of IRA, has collected and commented on the six articles that begin this issue.

Using Books to Reduce the Fears Of First-Grade Children

by JANE WEBSTER

MANY WRITERS agree that freedom from fear is one of the basic emotional needs of man. They also agree that if emotional needs are met, learning ability is increased. Ausubel (2), a physician and psychologist, has pointed out that the maladaptive effects of intense fear on problem solving and on delicate skills should not be underestimated.

For hundreds of years teachers have believed that stories affect human behavior. In Bible times stories were used in an attempt to change attitudes. Today schools and mental institutions continue to use stories in an attempt to reduce fear and anxiety and generally to improve mental health. However, little research has been undertaken in this area.

The memory of the response of a six-year-old child to a delightful story about a homeless kitten lingered with the writer for fifteen years. The experience was a striking one, since the child, who had shown extreme fear of cats, approached a cat without hesitation immediately after the reading of the story. Throughout the fifteen-year period the writer read stories of a mental health nature to groups of children ranging in age from eight to fourteen years. No attempt to evaluate the effect of the stories was made until the present study was undertaken at the first-grade level.

Since many fears are deep-seated, the reading of a single story seems to be a superficial means of reducing fears when compared with conditioning techniques involving use of real-life situations as reported by Jones (4). Also, some research (3, 5, 8) indicates that the acquisition of information does not assure a change in attitudes, or a resultant change in behavior if attitudes are changed. For this reason some writers have advocated the use of discussion following the reading of stories. Russell (6) says, "In good books, stories and poems the child may read of courage or kindness or cooperation and perhaps grasp something of the importance of these ideas. Reading about such things at one's leisure, or in a small group where unhurried discussion follows, is our best hope that such values will become part of the lives of boys and girls."

Heaton and Lewis (1) also stress the value of discussion when they tell us, "Teachers need to set up the learning situation in the classroom in such a way that there is discussion of the vicarious experience of books so that group appreciations and attitudes develop naturally. The oral reading of a story provides group shared experience. The discussion of a short story may provide an occasion for building group experience at a level where feelings as well as facts are comfortably shared."

The importance of discussion was kept in mind when the exploratory one-group action research situation of this study was set up in an attempt to discover some effects of stories on the reduction of fears of some first-grade children. Data were secured by means of private individual interviews of eighty children who were a cross-section group selected from regular first-grade classes.

The experimental interview was developed in order to eliminate the reading factor and to provide an indirect means of revealing the presence of fears. Each child was asked, "If you had a wish, what would you wish?" "What do you like more than anything else in the world?" "Tell me what you do not like." "Tell me about things that scare you, frighten you." "Do you like night or day best?" The child responded to each question before the succeeding question was asked. In the group of eighty children, thirty-five indicated fear of the dark, and five indicated fear of dogs. No attempt was made to measure the intensity of the fear.

The thirty-five children who had expressed fear of the dark were divided into five groups of seven children each. Then a different story (9, 10, 13, 16, 17) dealing positively with the dark was read once a week for five consecutive weeks to each of the groups of seven children. At the end of the five-week period each group had heard all five stories. There was an undirected discussion of each story immediately after the reading. It was a spontaneous shar-

ing of personal experiences and of reactions to the story. The story and discussion period ordinarily lasted about twenty minutes. Similarly, children who expressed fear of dogs were placed in one group and read and discussed five stories (11, 12, 14, 15, 18).

When the interviews were repeated three months after the reading of the last story it seemed that twenty-nine of the thirty-five children had reduced fear of the dark, and all five had reduced their fear of dogs. An impartial judge, who is a speech and curriculum consultant agreed with the results in an analysis of the records of the interviews.

In the protocols a striking change in feeling about the dark was indicated by the five pupils who had expressed fear of ghosts. Four stated a preference for the night and one liked the night equally as well as the day. Four children made specific reference to stories read, the reduction of fear apparently having been consciously associated with the reading of the stories. A child who had stated, "I am afraid of the dark. I want the door open," indicated in the last interview that he was afraid of nothing. He said, "I like both (night and day) best. I like the lights off." The response of another after the reading of the stories was, "I like to see the stars and hear the owls at night," and another, "I like night best. I'm not afraid because I think about the nice black things like in the book" (16).

Three of the five pupils who had reported fear of dogs indicated

change from a general fear of dogs to fear of, "some dogs," "mean dogs." One who had said, "Mother doesn't like dogs so I don't," indicated a change when he responded after the reading, "I don't like elephants, but I like all other animals." One pupil who had expressed dislike and fear of dogs in the initial interview expressed neither dislike nor fear of them after the reading of the stories. In the final interview he expressed a desire for a dog and said he liked dogs better than anything else!

The number of children indicating a reduction of fear seems to be surprisingly high. What are the factors which may have influenced the effectiveness of the stories? We do not presume to know the many factors which influence human behavior and emotion at any one time. It is possible that a relearning took place, the thought of the feared animal or of darkness having been related to the pleasant experience with the animal or with darkness during the story reading or the group sharing of the stories. Also, a reinforcement of the pleasant experience took place in the group discussion of the stories with the children.

The shared enthusiasm evidenced in group discussion seemed to aid in carrying acceptance of dogs or of darkness beyond the static phase of mere acceptance. Other factors to be considered are careful selection of books and the limitations inherent in the interview technique. The rapport which the children had established with an understanding person is another important factor in the

effectiveness of the stories. In a permissive environment in which the child experiences encouragement, respect, praise, attention, and affection, marked changes in behavior often take place.

The mechanics of setting up this type of research in the classroom can be simple. A reading group provides an opportunity for the reading and discussion of stories treating some of the many concerns of the elementary school child. Stories involving problems with new babies, with older brothers and sisters, of lack of possessions, or of honesty may help to increase understanding, which in turn affect the child's value system, influencing his choices and thus his behavior.

The contribution to the discussion which the child makes is itself a creative act which gives him status with his peers and his teacher as well as an experience of kinship.

Research will probably never adequately measure the results of these experiences, since exact measurement in the area of human emotions is difficult, if not impossible. However, the intuitive teacher can sense the increase in peace, security, and joy when such experiences are added to the other creative and satisfying ones which the curriculum provides. Sometimes, too, the teacher will note great gains in general school achievement.

Further exploration of this area might involve the use of control groups, stories being read to some of the children who had indicated fear, and not to others. Also, the effect of

stories not followed by discussion might be explored.

Shrodes (7) predicts that, for economy of time, the use of literature as a projective technique may be preferred to existing projective techniques or clinical interviews. Literature in the classroom may influence ideals, and also, properly used, may increase the emotional security of children.

(*The author is a speech therapist in the Contra Costa, California, County School Department. She worked on the study she reports at the University of California at Berkeley.*)

References

1. American Council on Education, Committee on Intergroup Education. *Reading Ladders for Human Relations* (Revised). Washington: American Council on Education, 1955.
2. Ausubel, David P. *Theory and Problems of Child Development*. New York: Grune and Stratton, 1958.
3. De Boer, John. "Literature and Human Behavior," *The English Journal*, 39 (Feb., 1959), 76-82.
4. Jones, Mary C. "The Elimination of Children's Fears," *Journal of Experimental Psychology*, 7 (Oct., 1924), 382-90.
5. Lodge, Helen C. "The Influence of Biography on the Moral Ideology of the Adolescent at the Eighth-Grade Level." Unpublished Doctor's dissertation, University of California, 1958.
6. Russell, David H. "Personal Values in Reading," *The Reading Teacher*, 12 (Oct., 1958), 3-9.
7. Shrodes, Caroline. "Bibliotherapy: a Theoretical and Clinical Experimental Study." Unpublished Doctor's dissertation, University of California, 1949.
8. Smith, Nila B. "Personal and Social Values of Reading," *Elementary English*, 25 (Dec., 1948), 490-500.

Children's Books

9. Brown, Margaret Wise. *A Child's Good Night Book*. New York: Scott, 1943.
10. Brown, Margaret Wise. *Goodnight Moon*. New York: Harper, 1947.
11. Dixon, Ruth. *Three Little Puppies*. Chicago: Rand McNally, 1952.
12. Gottlieb, William P. *Pal and Peter*. New York: Simon and Schuster, 1946.
13. Kelling, Furn. *Listen to the Night*. Nashville: Broadman, 1952.
14. Lowrey, Janette S. *The Poky Little Puppy*. New York: Simon and Schuster, 1946.
15. *Puppy Play House*. Polygraphic, 1951.
16. Smith, Dee. *A Black Velvet Story*. New York: Doubleday, 1945.
17. Steiner, Charlotte. *The Sleepy Quill*. New York: Doubleday, 1945.
18. Sutton, Felix. *The Nine Friendly Dogs*. New York: Wonder Books, 1954.

EDITOR'S COMMENT

The experimentation reported here is unique. While bibliotherapy is often talked about, it is seldom put to any real test. The results Miss Webster obtained were undoubtedly due to (1) the careful selection of the books which were read, (2) the discussion which she carried on with the students, and (3) the sympathy and understanding which she provided for the children's problems. It seems unlikely that the reading of the stories alone without discussion with a sympathetic teacher would bring the results that Miss Webster obtained.

Further experimentation in this area is badly needed. Experimentation involving control groups would place the findings on a much firmer basis, of course, as Miss Webster suggests.—T. C.

Children Who Read Before Grade One

by DOLORES DURKIN

CURRENT TRENDS in elementary education show a variety of "growing edges" and even a few "bursting seams." There appear to be steadily growing pressures to consider the possible merits of teaching reading to *certain* children before the first grade. The most significant of these pressures originates in the readily observable fact that today's four-and five-year-olds are becoming more and more sophisticated in their understanding of words and of reading. There is also the equally apparent fact that some of these children are learning to read before they enter grade one.

Actually, if time were taken to scrutinize the kind of world in which children are growing up today, neither of the above observations would be unexpected. The child's world is filled with word stimuli in the form of highway signs and posters, labels on packaged and canned goods, abundant supplies of books, TV advertisements, magazines, and newspapers. Children find themselves literally surrounded by words and, what is more important, by words that have real meaning and interest for them.

One such look at the young child's world was taken by the writer in the process of initiating a longitudinal study of 49 California children who learned to read at home. These children were reading at grade levels ranging from 1.5 to 4.6 when they

entered first grade. Because the study has been in progress for less than two years, its findings cannot be used now to assess the ultimate value of early ability in reading.*

This paper is a description of the 49 children being studied by the writer, with emphasis given to the kinds of factors which seemed especially relevant to their early learning to read. In addition, three hypotheses are discussed.

Subjects

Because of the lack of prior research in this area of preschool reading ability, the design of the study was guided by questions which were very basic and general in nature. One central question was concerned with the relative frequency of early reading ability.

As a way of selecting subjects a word identification test was individually administered to the beginning first graders ($N=5,103$) in one city. Children repeating first grade, as well as a small number of children who had been given some instruction in reading during the latter part of kindergarten, were not tested.

Following this procedure, 49 first-graders (29 girls and 20 boys) were identified as having some ability in reading prior to school instruction. Of these 49 children, 26 (53 per

*Detailed findings from the first year of this study are to be published as a monograph by the University of California Press.

cent) were Caucasian, 12 (24 per cent) were Negro, and 11 (or 22 per cent) were Oriental.* The Oriental background accounted for seven of the ten bilingual children.

Family interview data concerned with socio-economic status indicated that seven of the children in the total group of 49 could be classified as upper-middle class, 15 as lower-middle class, 26 as upper-lower class, and one as lower-lower class.

Intelligence test data, obtained from the Stanford-Binet in the second month of first grade, indicated IQ's that varied from 91 to 161, and MA's that varied from 5.1 to 10.7 years. The median IQ for the group was 121, and the median MA was 7.1 years.

Progress in Reading

Closely following the identification of subjects, and still within the first two weeks of first grade, standardized reading tests were administered. The scores ranged, according to grade norms, from 1.5 to 4.6, with a mean of 2.3. Reading tests administered at the end of the semester and again at the beginning and end of the summer vacation period showed encouraging gains in achievement. By this latter date, for example, the children's grade scores varied from 2.3 to 7.1, while the mean score was 4.0.

Relevant Factors in Early Learning

That the 49 children in this study

*It is interesting to compare this racial distribution with that of the population from which subjects were selected. This was estimated to be 78 per cent Caucasian, 20 per cent Negro, and 2 per cent Oriental.

constituted, in many ways, a very heterogeneous group of boys and girls in no way overshadowed the fact that they also shared important individual and family characteristics. It was true, for example, that a wide range of intellectual potential was found in the group. But it was also true that, as described by parents and later by teachers, a majority of the children had exceptionally good memories and ability to concentrate.

In addition, the majority were also described as being curious, conscientious, serious minded, persistent, and self-reliant. While these latter characteristics may be seen as relating more to personality than to intelligence, they remain nonetheless obvious assets in the process of learning to read, at home, or in school.

A look at the families of the children in this study reveals other similarities and assets. One important similarity was their high regard for reading. As a result of this common family pattern, all of the children in the study had been read to regularly at home. In some instances this reading began at the age of two. In all of these 49 families there was at least one person who took the time and had the patience to answer the children's questions about words and about reading. And, according to most of the parents, the questioning was constant.

Among the families coming from the lower socio-economic levels there was a tendency to see preschool ability in reading as the beginning of "better things to come." In contrast the upper-middle class parents

tended to show anxiety about the possibility of problems ensuing from early reading. This important difference in parental attitude might account for the particular social class distribution found among subjects in the study.

Obviously, none of this speculation warrants the assertion that conscious attempts had been made to keep the upper-middle class subjects from learning to read early, and to pressure the other subjects into reading. Any such differentiation would be based on an artificial isolation of the variable of social class status from other important observations. In all of the classes represented in this study there were curious children; there were parents who took the time to answer their questions; and there were older siblings who were both willing and able to teach interested brothers and sisters how to read.

Emerging Hypotheses

What do some of the findings reported above suggest to those who might ultimately have responsibility for selecting children who would profit from reading instruction before first grade. Comments will be restricted to what the writer sees as three hypotheses emerging from the study:

1. *Current intelligence tests are seriously inadequate in identifying and measuring "what it takes" to learn to read.* The fact that over one-third of the children in this study had IQ's of less than 110 would at least suggest this test inadequacy, and would also suggest the existence

of important intellectual factors or abilities not included in IQ's.

Here, Guilford's noteworthy attempts (2, 3) to define the components of the human intellect become most relevant. Of special potential importance are his contentions concerning the existence of abilities to cognize figural, semantic, and symbolic units, and to perceive what he calls "auditory figures." Any such abilities would have obvious and important implications for reading readiness tests as well as for intelligence testing.

2. *Particular kinds of personality characteristics are important assets in the process of learning to read.* This hypothesis was also suggested by findings in the study, and it is one which, up to now, has not been given the research attention it rightfully merits. Researchers who have been concerned about retardation in reading have commonly focused their attention on personality maladjustment as an important factor in the retardation. But the researchers concerned with children who succeed in learning to read have almost completely overlooked personality structure as a contributing factor. Instead they have tended to concentrate their study on such areas as quality of experiential background, maturity in language development, ability to make visual and auditory discriminations, and so on.

Ultimately, probing in areas suggested by this second hypothesis ought to help in identifying those pre-first grade children who are "ready" to learn to read. Such study

might also add to our understanding of why certain children achieve well in some academic areas but not in others.

3. A child's perception of what it means to "read" affects his attitude toward learning to read and, consequently, affects his achievement. Attitudes toward a particular learning affect success in the learning. We have failed to make use of the principle inasmuch as little or nothing is known about the young child's conception of what it means to learn to read.

One child may view reading as a symbol of growing up, while another sees it as a kind of unwanted independence. One child sees it as a way of catching up or keeping up with older siblings, and for another child it is a way of identifying with parents. These are important kinds of differences which may exist and which, in turn, have important implications for the task of identifying "ready" children.

(The author is an Associate Professor of Education at Teachers College, Columbia University. This report came from a longitudinal study which she began in the Berkeley public schools while she was at the University of California. She is continuing to follow up her subjects as much as possible.)

References

1. Durkin, Dolores. "The Precocious Reader," *California Journal for Instructional Improvement*, II (Dec., 1959), 24-28.
2. Guilford, J. P. "Frontiers in Thinking That Teachers Should Know About," *The Reading Teacher*, XIII (Feb., 1960), 176-182.
3. Guilford, J. P. "Three Faces of Intellect," *American Psychologist*, XIV (Aug., 1959), 469-79.

EDITOR'S COMMENT

Great interest is currently being shown in the early introduction of reading instruction. In a few communities this instruction is already under way in the kindergarten. Miss Durkin's longitudinal study will provide some indication of the educational, personal, and social development of children who learn to read before grade one. Her study, of course, provides no information as to what the educational progress, personal or social development might be of children who were given systematic instruction in reading in the kindergarten.

There is no question that extremely young children can be taught certain aspects of reading, as was demonstrated by Davidson in the 1920's. The question is not "Can such teaching be done?" The important question is "What is the educational value of this early instruction?"—T. C.

Reading Methodology: Some Alternative Organizational Principles

by RICHARD H. BLOOMER

SOME GENERALLY accepted principles govern the organization of materials for teaching reading. If other principles were utilized, reading materials would be organized in a somewhat different manner. The present study selected some principles alternative to those currently used, organized a reading program derived from them, and tested this reading program against others currently in use.

Word length and frequency of occurrence. Difficulty of reading words is presently measured largely in terms of frequency of occurrence, on the assumption that more familiar material is easier for the child to learn. However, a number of studies (1, 4, 9) have indicated that the relationship between learning difficulty and word length is considerably higher than the relationship between frequency of occurrence and reading difficulty.

Size of learning unit. Some early perception studies indicated that more letters could be perceived at one exposure if the letters were combined into words (3). Hence, reading is commonly taught with whole word exposure. But an experimental perception situation with respondents fully familiar with the word and its meaning is crucially different from an original-learning situation. Lyons (6) and Krueger (5) found learning efficiency related to complexity and

size of unit to be learned: in a given number of trials greater numbers of small units can be learned. Therefore the present study employed letters rather than words as learning units.

Response consistency. Transfer of training studies have indicated negative transfer with two identical stimuli requiring different responses. Thus, with lack of phonetic consistency in the English language, the present study used Bloomfield's suggestion: elimination of all but one sound per letter form for initial reading learning, then later systematic teaching of alternative sounds (2).

Stimulus discriminability. Teaching children to learn to read words, Wiley (10) found many errors to be confusions between letters similar in sound or shape. Because stimulus confusion in a learning situation is a function of stimulus similarity (7, 8), the present study organized each successive stimulus to be maximally discriminable from preceding ones.

Repetition. Many investigators found repetitions necessary in the learning of complex stimuli, repetition being the number of times a given word is repeated. In the present study, with the stimulus unit a letter, repetition meant occurrence of a letter in a meaningful word.

Number of choices. With words as learning units, the number of choices a child has to make in recognition is a direct function of the

number of words already learned. As the number of words learned increases, probability of error increases. Woolman (11) showed choice reduction to lead to greater learning efficiency. The present study used single letters as stimulus units, limiting the number of possible choices to twenty-five, thus controlling the number of choices available to the child and reducing probability of error. Error probability was further reduced by presenting each successive letter only after preceding letters were thoroughly learned.

Application of these alternative principles led to a classroom adaptation of the Progressive Choice Method outlined below.*

Procedure

Population. The four experimental and six control classes were in three central schools in communities of 5,000 and 7,000 population. Pupils in two of the schools were randomly assigned classes; pupils in the third were alphabetically assigned.

Teachers in the experiment. The experimental teachers averaged 5.0 years of teaching and 12 graduate hours. The control teachers averaged 7.8 years of teaching and 14.3 graduate hours. To control the factor of differential motivation of teachers to succeed, one experimental teacher was randomly selected by the prin-

*The Progressive Choice Method of Dr. Myron Woolman, Human Resources Research Office, Washington, D. C., was developed for individual readers. The present study is an experimental test of the author's classroom adaptation. The result is neither phonics nor "look and say" though both techniques are employed.

cipal and the experimenter. The other three were volunteers. No significant difference appeared in final test scores of the experimental teachers.

Each control teacher was aware of the experiment and that comparative measurements would be made of her class at the year's end. Each taught with the program she had customarily used. No significant differences appeared in final test scores of the control teachers, indicating equivalent performance levels in control classes.

The method. Experimental teachers taught from a specially prepared, mimeographed workbook systematically presenting the Progressive Choice Method. Twenty-five workbook units were followed by a reader with twenty phonetically consistent stories. Each workbook unit presented a letter in isolation with its most frequent sound, followed by words made of any previously learned letters and the unit letter. Words were combined into meaningful phrases; special exercises taught discrimination between the unit letter and previously learned letters similar in shape or sound.

When all letters and their most frequent sounds were learned, the children began the phonetically consistent readers, readability controlled by word length. Average time per day for teaching reading was approximately an hour and a half. On completion of method material, experimental teachers used a basal reader supplied by the school, which all children in the experimental

groups finished by the year's end. Individual reading in supplemental readers followed the experimental course of study.

Control teachers used basal reader material they had used the previous year, which all but one followed closely. The other used an individualized reading approach where each child worked with a different book. The amount of time spent in reading was at the teacher's discretion; each control teacher reported spending considerable time with upper and middle groups in independent reading of supplemental readers.

Tests. Initially Gates' Reading Readiness Test was given to experimental and control classes the last week in September. Final tests in June were Gates' Primary Reading Tests for Word Recognition, Sentence Reading, and Paragraph Reading. All pupils who had not taken both initial and final tests were excluded from the study. Data were treated by analysis of co-variance.

Results

In no case was any mean of any control class superior to mean performance of any experimental class. Average superiority of the experimental group was 4.3 months in word recognition, 3.4 months in sentence reading, 2.9 months in paragraph reading, and in average reading, 3.4 months.

Reading readiness. Readiness scores for the two groups were not the same. The advantage was in favor of the experimental group, the

difference significant beyond the .01 level. When readiness was held constant by analysis of co-variance (in other words, when the experimental and control groups were made equal in readiness scores by a statistical procedure) the experimental group was superior to the control group in word recognition, sentence reading, and reading average. Difference between experimental and control groups in paragraph reading can be seen as a function of difference in readiness scores.

After the seventeen-week experimental program, the experimental pupils were grouped and given their basal reader materials. At this time the pupils were largely able to read independently; hence preparation time for each story was lessened considerably. Words which they could not figure out with their phonetic skills were necessarily taught by sight, and a small amount of time was spent on meanings of words not previously encountered.

The pupils completed the first year of their basal reading program, including pre-primer, primer, and reader, in less than half the time normally required. The fastest children read and discussed all the stories in approximately two and one-half months, and the slowest children in approximately four and one-half months. All experimental pupils had completed all the basal reader material by final testing. Most read numbers of supplementary books as well. In essence, these children not only learned to read better, but covered material more efficiently.

Discussion

When educators selected frequency of occurrence in preference to word length as a technique for grading word difficulty, one deciding factor was the problem of meaning. Use of frequency, the assumption was, would not only insure that the child would probably understand the words to a greater extent than less frequent words, but also insure him the words he needed for communication in our society. At that time, the 1920's and '30's, children were not exposed continually from birth to mass communication media.

The present-day child very probably understands more words and has greater language facility than preceding generations. Hence, the problems of sufficient understanding background to learn to read and of ability to communicate have been mitigated by radio and television. With the contemporary child emphasis may more rightly be put upon concept expansion. Word length then becomes a more reasonable criterion of word difficulty.

Word length relates somewhat to familiarity as measured by frequency of occurrence. Many words the child meets will be familiar, frequent words, but a proportion of short words are relatively infrequent, and learning them will serve to expand understanding of new concepts.

Other alternative principles employed in the present study are each dependent upon the initial decision to use word length instead of frequency of occurrence. When frequency is the difficulty criterion, the

word rather than the letter must of necessity be the smallest teachable unit. Further, maximizing discriminability between words becomes complicated and difficult with a limited frequency range. When words combine into meaningful sentences and phrases, discriminability must break down in favor of language patterns. Similarly, repetitions must be of words, permitting little variability in early reading material. When the letter is the unit, the period of low variability is not as prolonged.

Phonetic consistency may be applied when frequency is the difficulty criterion, but emphasis on the whole word repetition makes it a concept of little obvious merit.

The present study does not reveal the specific contribution of each principle to reading efficiency. Further effects of the experimental program upon pupils' future reading success, both in continuation of the experimental method and in traditional methods, must be determined. Implications of the experiment are clear: if alternative organizational principles produce more efficient reading learning, then current reading teaching should be re-evaluated in the light of the modern child's language experiences. Using concepts of stimulus organization not now customarily applied to reading material may profitably produce a more efficient reading teaching technique than that currently in use.

(Dr. Bloomer has been since 1956 at the State University College of Education in Geneseo, New York, where he is an Associate Professor of

Education and Director of the Educational Clinic.)

References

1. Bloomer, R. H. "Word Length and Complexity Variables in Spelling Difficulty," *Journal of Educational Research*, 49 (1956), 551-56.
2. Bloomfield, L. "Linguistics and Reading," *Elementary English Review*, 19 (1942), 125-30, 183-86.
3. Cattell, J. M. "Über die Ziet der Erkennung und Benennung von Schriftzeichen, Bildern und Farben." *Philosophische Studien*, 2 (1885), 635-50.
4. Gates, A. I., and Boeker, E. "A Study of Initial Stages in Reading by Pre-school Children," *Teachers College Record*, 24 (1923), 469-88.
5. Krueger, W. C. "Rate of Progress as Related to Difficulty of Assignment," *Journal of Educational Psychology*, 37 (1946), 247-49.
6. Lyon, D. O. "The Relation of Length of Material to the Time Taken for Learning and the Optimum Distribution of Time," *Journal of Educational Psychology*, 5 (1914), 1-9, 85-91, 155-63.
7. Osgood, C. E. "The Similarity Paradox in Human Learning: A Resolution," *Psychological Review*, 56 (1949), 132-43.
8. Rathkopf, E. Z. "A Measure of Stimulus Similarity and Errors in Some Paired Associate Learning Tasks," *Journal of Experimental Psychology*, 53 (1957), 94-101.
9. Rickard, G. E. "The Recognition Vocabulary of Primary Pupils," *Journal of Educational Research*, 29 (1935), 281-92.
10. Wiley, E. G. "Difficult Words and the Beginner," *Journal of Educational Research*, 17 (1928), 278-89.
11. Woolman, M. "The Effect of Varying the Number of Choices in the Identification of Very Similar Stimuli." Unpublished doctoral dissertation, Columbia University, 1955.

EDITOR'S COMMENT

The research reported here illustrates clearly that students can be taught to read at the beginning stages with a variety of approaches. The question to be answered is which of the many methods, or as Bloomer suggests, alternative organizational principles, should be utilized in beginning reading.

In evaluating this study, it should be kept in mind that three of the four teachers in the experimental group volunteered their services and that no attempt was made to equalize the time spent in reading instruction in the experimental and control groups. While a number of changes were made in the customary beginning reading program in the experimental classrooms, because of the design of the experiment the results may be assigned to any one or a combination of factors which were altered in the study.—T. C.

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Is the Tachistoscope a Worthwhile Teaching Tool?

by JOHN R. BORMUTH AND CLEATUS C. AKER

TACHISTOSCOPIC DEVICES were first used as teaching aids during World War II, when the instrument was borrowed from the psychology laboratory to aid in training men for aircraft identification. The decrease in perception time for aircraft identification suggested that perhaps the visual perception required in reading might be improved by using the device.

Research concerning the effectiveness of tachistoscopic training has produced extreme reactions, ranging from unqualified approval to declarations of total ineffectiveness. Critical study of the research indicates that these differences may be the result of incomplete control of variables important to the reading process. In this research little attempt has been made to control other factors in order to isolate the effects of tachistoscopic training. The research also seems to neglect the idea that perception is increased through the use of meaningful materials, for the materials projected tachistoscopically have often been meaningless.

Renshaw (5) found that speed of perception and span of perception of adults could be increased by use of a tachistoscope, along with an increase in reading rate. Adams (1) found that with tachistoscopic training fifth-grade pupils increased their reading rate up to more than 200 words per minute with accompanying gains in comprehension. Dumler

(2) found that college students trained with a tachistoscope and reading accelerators made a significant and permanent gain in rate of reading.

Maclatchy (3) reported that use of a tachistoscope in primary grades resulted in improved reading, number work, range, quickness, and accuracy of observation, and that children could be taught to see whole phrases, thoughts, or sentences at one fixation. None of these studies attempted to control the variables of sex, age, visual acuity, intelligence, or reading ability, and they tended to overlook the fact that motivation is a prime factor in all learning.

Some experimental studies have shown the tachistoscope to be ineffective as a tool in the development of increased reading speed. Among these are the studies of Smith and Smith (6) and Marvel (4). Marvel's work emphasized motivation but failed to control the materials used.

The authors in the experiment reported here have attempted to answer these questions: (1) Is the tachistoscope effective as a means of increasing rate of reading? (2) Can comprehension be maintained or improved as reading rate is improved? (3) Can vocabulary be increased through tachistoscopic training? Analysis of existing research reveals this study to be unique in that the variables of instructional materials, vocabulary presentation, sex, age,

intelligence, visual acuity, motivation, and initial reading ability were controlled, and that tachistoscopically projected materials were meaningful phrases.

The four sixth-grade classes of the two public elementary schools in Munster, Indiana, served as subjects for this experiment. One class from each school was selected for the experimental group in order to assure a similarity of socio-economic status. The remaining two classes were held as control subjects. Two of the four teachers involved had previous experience with the program. One was assigned to the control and one to the experimental group. The other two teachers, having had no experience with any phase of the program, were assigned to opposite groups. Thus some degree of balance in teaching skill was achieved.

Reading instruction was given at the same hour each day, and equal time was given to each group. Instruction was equated in the following ways: (1) Each group was assigned twenty speed and comprehension exercises from the *Science Research Associates Better Reading Series, Book I*. These exercises were given weekly during the twenty-week period of the program. Each exercise consisted of a 1,350-word story followed by a twenty-item multiple-choice test as a check on comprehension. Subjects were instructed to read as rapidly as they could and maintain understanding. Upon completion of the reading the subject noted the elapsed time. He then turned to the comprehension test and answered

the questions without further reference to the text. The elapsed time was converted to reading rate in words per minute. The tests were scored, and a corrected reading rate was obtained by multiplying the raw reading rate by the per cent of comprehension. Subjects were urged to experiment on certain tests, but they were continually reminded not to unduly sacrifice comprehension for speed. (2) Each subject maintained an individual graph showing his progress in reading rate and comprehension as measured by the SRA exercises. (3) Each group worked on two comprehension and vocabulary exercises each week based on the regular basic sixth-grade readers. These teacher-constructed exercises were used uniformly throughout both groups. (4) Each group was urged by its teacher to achieve greater reading rate and comprehension.

The experimental group was given two exercises per week with a tachistoscope. The exercises consisted of flashing phrases of from three to five words on a screen. Society for Visual Education's Intermediate Graded Word Phrases, Levels E and F, Groups 1 to 16, and Level G, Groups 1 to 8, were used. Each group consisted of 25 meaningful phrases. Each phrase was written by the subject as he viewed it, and his answer was checked for accuracy. When the subject achieved accurate perception at one rate of viewing, he was advanced to a group viewing at the next faster rate. The device used for tachistoscopic projection was the SVE Speed-i-o-Scope. Its shutter

speed was adjustable to intervals of 1, .5, .2, .1, .04, .02, and .01 second. At the beginning of each week, and prior to the tachistoscopic exercises, the experimental groups were given a vocabulary matching exercise utilizing the more difficult words to be found in the tachistoscopic exercises for the week.

The control group received no tachistoscopic training. To equate vocabulary training in the groups, the control group was given the vocabulary exercises described above plus a printed list of the phrases contained in the tachistoscopic exercises. The phrases were written into meaningful sentences by the subjects. To further equate the instruction of the groups, all other elements of reading instruction were held as nearly identical as possible.

All subjects were given the Iowa Silent Reading Test, Form Am, and the SRA Primary Mental Abilities Test during the week prior to the initiation of the program. Form Bm of the Iowa Silent Reading Test served as the posttest. It was discovered, however, that the Iowa tests had limitations: (1) Many pupils achieved maximum scores on the rate section of the posttest, limiting the basis for comparing groups. (2) All sections of the Iowa tests are timed. Any increase in reading rate would tend to increase the number of correct responses in other sections of the test.

In order to insure that the groups to be compared were matched to the highest possible degree, the following steps were taken: (1) All subjects

were given the Keystone Telebinocular vision test, and those evidencing visual difficulty were eliminated from the study. (2) No pupil who had been retained or double-promoted was used as a subject, thus assuring a high degree of homogeneity of age. (3) The final groups were chosen by pairs matched on the basis of sex and intelligence. In order to form a pair, the subjects had to be of the same sex and within five percentile points of each other in intelligence test scores. Using this procedure, 39 matched pairs were selected. (4) Finally, scores achieved on the rate, comprehension, and vocabulary sections of the pretest were examined to discover if any differences existed in those areas.

The groups initially matched by pairs on the basis of intelligence and sex were examined further for equality of their group mean standard scores on the SRA Primary Mental Abilities Test and Form Am of the Iowa Silent Reading Test (Table I). The number of cases was deemed sufficient to justify use of the critical ratio rather than the slightly more severe *t*-ratio. It was concluded that no significant differences existed between the groups.

Data gathered in the administration of form Bm at the end of the twenty-week experimental period were analyzed to discover if training with a tachistoscope using meaningful word groupings increased rate of reading over the amount achieved by other motivated practice using essentially the same materials. The results are presented in Table II.

TABLE I
SCORES OF IOWA SILENT READING TEST
AND PERCENTILE SCORES OF SRA PRIMARY MENTAL ABILITIES TEST

Test	Control		Experimental		Diff.	SE diff.	C.R.
	Mean	SD	Mean	SD			
Rate	153.65	18.10	151.75	17.40	1.90	4.02	.47
Comp.	150.15	18.48	152.27	17.44	2.12	4.98	.42
Vocab.	155.85	18.10	154.55	15.10	1.30	3.81	.34
PMA	69.70	26.40	69.45	26.90	.25	6.03	.04

TABLE II
STANDARD SCORES OF IOWA SILENT READING TEST, FORM BM (POSTTEST)

Test	Control		Experimental		Diff.	SE diff.	C.R.
	Mean	SD	Mean	SD			
Rate	181.43	20.35	183.65	23.35	2.22	4.46	.50
Comp.	159.70	20.25	162.58	15.21	2.88	4.22	.68
Vocab.	161.70	17.35	164.68	14.30	2.98	2.44	1.21

As in the matching procedure, the comprehension scores were arrived at by grouping the means and standard deviations on the Sentence Meaning, Paragraph Comprehension, and Comprehension subtests.

The data contained in Table II show that there were only chance differences between the groups in comprehension, rate and vocabulary. However, two conditions obtain which make it impossible to conclude that the experimental training produced no effect. First, it may be noted from the data that the experimental group gained 4.12 standard score points more in rate than did the control group from the pretest to the posttest. Secondly, thirteen subjects in the experimental group and only seven in the control group attained maximum scores on the rate test.

It is likely, then, that the experimental group's mean would have been higher had a longer test been used. Thus, it is possible to argue

from the data that a significant difference would have been found had the initial difference been taken into account and a more adequate test of rate been used. The authors agree that this may be the case and worth exploring for theoretical reasons. They doubt, however, that the size of this difference has sufficient practical significance to warrant expenditure of funds to include tachistoscopic training as a regular part of a reading program.

(John R. Bormuth is a school principal in the Metropolitan School District of Calumet Township, Lake County, Indiana. Co-author Cleatus C. Aker is a principal in the Munster, Indiana, Public Schools.)

References

1. Adams, Joseph J. "Does the Tachistoscope Help?" *CTA Journal*, 50 (Mar. 1954), 20.
2. Dumlir, Marvin J. "A Study of Factors Related to Gains in the Reading Rate of College Students Trained With the Tachistoscope and Accelerator," *Journal*

- of Educational Research*, 52 (Sept., 1958), 27-30.
3. Maclatchy, Josephine H. "Bexley Reading Study," *Educational Research Bulletin*, 25 (Sept., 18, 1946), 141-168.
 4. Marvel, John A. "Acquisition and Retention of Reading Performance on Two Response Dimensions as Related to 'Set' and Tachistoscopic Training," *Journal of Educational Research*, 52 (Feb., 1959), 232-237.
 5. Renshaw, Samuel. "The Visual Perception and Reproduction of Forms by Tachistoscopic Methods," *The Journal of Psychology*, 20 (Jan., 1945), 217-252.
 6. Smith, Edwin H., and Smith, Marie P. "Speed Reading in the Machine Age," *College English*, 20 (Feb., 1959), 242-244.
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EDITOR'S COMMENT

Bormuth and Aker take a refreshingly rational approach to the testing of mechanical devices in the teaching of reading. At the present time, with the public's fancy taken with mechanical devices for teaching, there is a special need for the profession to maintain an open-minded but at the same time a critical and questioning attitude toward the use of these mechanical devices.—T. C.

LIST YOUR RESEARCH IN PROGRESS

For several years the research column of **THE READING TEACHER** included annotations of research in progress by members of IRA. A number of members of the association have expressed interest in seeing such a list continued, but it is recognized that the full annotated list can monopolize the space usually devoted to reviews of published research. This problem will grow more acute as membership increases.

The following procedure will instead be followed: If you have research in progress, please submit a *brief* description of your study, together with your name and address, to the editor of this column. As in former years, your reports should be limited to current studies *before* publication, so the list will actually reflect trends in new research rather than duplicate other bibliographies. Arrangements have been made to have the total list, with annotations, duplicated and distributed to any member requesting a copy, on payment of the postage and handling cost. Announcement of the availability of the list will be made in a later issue of the magazine. Please submit your summary by *February 1, 1961*, so the list can be ready before the end of the school year.

Send your summary to: Agatha Townsend, R.D. 2, Kutztown, Pennsylvania.

The Vocabulary in Primary Arithmetic Texts

by JAMES F. KERFOOT

ONE OF THE problems which primary teachers face in teaching arithmetic is that of adjusting instruction to the reading difficulty of the materials. How can a teacher help a poor reader with the vocabulary he will meet in arithmetic? Are some words used so consistently in current arithmetic materials that they can be anticipated? Can a list of words be compiled which will provide the teacher with a guide to the difficulty of the arithmetic vocabulary that his class is likely to meet?

In view of the above problem and in response to these questions, arithmetic word lists were compiled for the first and second grades. Six current arithmetic textbook series were examined at each of these grade levels to answer the following two questions: (1) Which words appear so frequently and in a sufficient number of textbooks that they might be considered basic? (2) How can the relative difficulty of these basic words be determined?

Selection of Words

Every word appearing in each of the arithmetic texts was recorded and counted to provide the number of different words at each grade level and the frequency with which these different words occur. From this data a list of words which occur commonly and frequently was developed for each grade level. To be included in the lists a word had to meet two

criteria: (1) occurrence in at least three of the six textbooks examined, and (2) total frequency of ten or above.

Appearance of a word in only one or two texts did not suggest that the word was important. Although the choice of a frequency of ten as a criterion is somewhat arbitrary, any word which appears fewer than ten times represents less than one tenth of one per cent of the total number of running words for that grade level. Words which constitute such a small percentage of the running words cannot reasonably be considered basic.

The following rules were observed in deciding which word variants were counted as separate words:

1. Words forming the plural other than by adding *s* were listed as new words.
2. Words forming a possessive by adding '*'s* or *s'* were counted as new words.
3. Words that contain a hyphen were separated and counted separately.
4. Words with a common root, but with variant endings, such as *er*, *ed*, *ing*, were counted as separate words.

Vocabulary Difficulty

To determine vocabulary difficulty, each word in the arithmetic word list was checked with two lists of words considered easy for children.

The lists used for this comparison are the Dale List of 769 Easy Words and the revised Gates List of Vocabulary for the Primary Grades:*

In the basic arithmetic word lists which follow, the words are keyed to indicate their appearance in the Dale and Gates lists. Words appearing in the Dale list are marked D. Words appearing in the first five hundred words of the Gates list are marked G-1; words appearing in the second, third, and fourth grouping in the Gates list are marked G-2, G-3, and G-4 respectively. These markings give a rough estimate of the difficulty of the words.

First-Grade Basic List

The first-grade basic list has a total of 49 words which occur ten or more times and appear in at least three textbooks at the first-grade level. All the words occur in either the Gates or Dale list.

a (D, G-1)	eight (D, G-1)
all (D, G-1)	find (D, G-1)
and (D, G-1)	first (D, G-1)
are (D, G-1)	five (D, G-1)
away (D, G-1)	four (D, G-1)
ball (D, G-1)	from (D, G-1)
black (D, G-1)	girl (D, G-1)
boat (D, G-1)	has (D, G-1)
boy (D, G-1)	hat (D, G-1)
by (D, G-1)	how (D, G-1)
cent (D, G-1)	in (D, G-1)
children (D, G-1)	is (D, G-1)
count (D, G-1)	left (D, G-1)
dog (D, G-1)	
draw (D, G-1)	

*Edgar Dale, "Comparison of the Word Lists," *Educational Research Bulletin*, 10 (Dec., 1931), 484-489, and Arthur I. Gates, *A Reading Vocabulary for the Primary Grades*, Revised. New York: Bureau of Publications, Teachers College, Columbia University, 1935.

many (D, G-1)	take (D, G-1)
more (D, G-2)	tell (D, G-1)
	ten (D, G-1)
nine (D, G-1)	the (D, G-1)
number (D, G-3)	there (D, G-1)
	three (D, G-1)
o'clock (G-2)	to (D, G-1)
one (D, G-1)	two (D, G-1)
see (D, G-1)	we (D, G-1)
seven (D, G-1)	write (D, G-1)
show (D, G-1)	
six (D, G-1)	you (D, G-1)

Second-Grade Basic List

At the second-grade level a list of 370 words was developed which occur ten or more times and appear in at least three of the six textbooks examined. Sixty-two of these words, or 17 per cent, do not appear on either the Gates or Dale list. (Gates suggests that words with variant endings, such as *ing*, *er*, and *ed*, may be used interchangeably with the root words. In this study, words with variant endings are counted separately.) Words not on either list may require special attention by the teacher. Eighteen words on this list are proper nouns, and proper nouns are excluded from both the Gates and Dale lists. Since many of these proper nouns may well be familiar to the children, the list may be less difficult than is suggested by the number which do not occur on either the Gates or Dale list.

a (D, G-1)	answer (D, G-1)
about (D, G-1)	apple (D, G-1)
above (D, G-2)	are (D, G-1)
add (G-3)	around (D, G-1)
adding	as (D, G-1)
addition	ask (D, G-1)
after (D, G-1)	at (D, G-1)
airplane (G-2)	ate (G-1)
all (D, G-1)	away (D, G-1)
an (D, G-1)	baby (D, G-1)
and (D, G-1)	back (D, G-1)
animal (D, G-1)	ball (D, G-1)
Ann	balloon (G-1)
another (D, G-1)	

- bank (D, G-2) did (D, G-1)
 bar dime
 barn (G-1) do (D, G-1)
 be (D, G-1) does (D, G-1)
 bead (G-3) dog (D, G-1)
 bear (D, G-1) doll (G-1)
 below (G-2) dollar (G-2)
 Betty dot (G-3)
 between (D, G-2) down (D, G-1)
 big (D, G-1) dozen (G-3)
 Bill draw (D, G-1)
 bird (D, G-1) dresses
 black (D, G-1) duck (G-1)
 block (G-2) each (D, G-1)
 blue (D, G-1) eat (D, G-1)
 boat (D, G-1) eating
 Bob egg (D, G-1)
 book (D, G-1) eight (D, G-1)
 both (D, G-1) elephant (G-1)
 bought (G-2) eleven (G-3)
 box (D, G-1) equal
 boxes
 boy (D, G-1) fact (G-3)
 brown (D, G-1) father (D, G-1)
 but (D, G-1) fifteen
 buy (D, G-1) fifth
 by (D, G-1) fill (D, G-1)
 cake (D, G-1) find (D, G-1)
 called finding
 came (D, G-1) first (D, G-1)
 can (D, G-1) fish (D, G-1)
 candy (G-1) five (D, G-1)
 car (D, G-1) flower (D, G-1)
 card (G-2) for (D, G-1)
 cat (G-1) found (D, G-1)
 caught (G-2) four (D, G-1)
 cent (D, G-1) fourth (G-3)
 chair (D, G-1) Friday (G-4)
 change (D, G-2) frog (G-2)
 chicken (G-1) from (D, G-1)
 child (D, G-1) game (D, G-1)
 children (D, G-1) garden (D, G-1)
 circus (G-2) gave (D, G-1)
 clock (D, G-1) get (D, G-1)
 clown (G-2) girl (D, G-1)
 coat (D, G-1) give (D, G-1)
 color (D, G-1) glasses
 come (D, G-1) go (D, G-1)
 cone gone (D, G-2)
 cookies got (D, G-1)
 cost (D, G-3) green (D, G-1)
 count (D, G-1) ground (D, G-1)
 counted group
 counting
 cover (D, G-2) had (D, G-1)
 cow (D, G-1) half (D, G-2)
 cream (G-3) halves
 cross (D, G-2) hand (D, G-1)
 cup (D, G-1) has (D, G-1)
 cut (D, G-1) hat (D, G-1)
 day (D, G-1) have (D, G-1)
 Dick he (D, G-1)
- help (D, G-1)
 her (D, G-1)
 here (D, G-1)
 hill (D, G-1)
 him (D, G-1)
 his (D, G-1)
 hold (D, G-1)
 horse (D, G-1)
 house (D, G-1)
 how (D, G-1)
 hundred (D, G-2)
 I (D, G-1)
 if (D, G-1)
 in (D, G-1)
 inches
 into (D, G-1)
 is (D, G-1)
 it (D, G-1)
 Jack
 Jack's
 jacks
 Jane
 Jim
 Joe
 John
 jumped
 just (D, G-1)
 kitten (G-1)
 know (D, G-1)
 last (D, G-2)
 learning
 leaves (D, G-1)
 left (D, G-1)
 less (G-3)
 letter (D, G-1)
 like (D, G-1)
 line (D, G-2)
 little (D, G-1)
 long (D, G-1)
 look (D, G-1)
 lost (D, G-1)
 made (D, G-1)
 make (D, G-1)
 man (D, G-1)
 many (D, G-1)
 marble (G-3)
 Mary
 May (D, G-4)
 means (D, G-2)
 measure (D, G-3)
 milk (D, G-1)
 minute (D, G-2)
 missing
 Monday (G-3)
 money (D, G-1)
 monkey (G-1)
 more (D, G-2)
 most (D, G-2)
 mother (D, G-1)
- much (D, G-1)
 must (D, G-1)
 name (D, G-1)
 Nan
 need (D, G-2)
 needed
 new (D, G-1)
 next (D, G-1)
 nickel (G-2)
 nine (D, G-1)
 no (D, G-1)
 not (D, G-1)
 now (D, G-1)
 number (D, G-3)
- o'clock (G-2)
 of (D, G-1)
 on (D, G-1)
 one (D, G-1)
 only (D, G-1)
 or (D, G-1)
 orange (G-2)
 other (D, G-1)
 out (D, G-1)
 over (D, G-1)
- page (D, G-2)
 pair (D, G-3)
 paper (D, G-1)
 part (D, G-3)
 party (D, G-1)
 past (G-3)
 pen (D, G-2)
 pencil (G-2)
 pennies
 pet (G-1)
 picture (D, G-1)
 pie (G-1)
 piece (D, G-2)
 pig (G-1)
 pint
 place (D, G-1)
 plant (D, G-1)
 play (D, G-1)
 playing
 point (D, G-2)
 ponies
 pound (D, G-3)
 problem
 put (D, G-1)
- quart (G-4)
 quarter (D)
 question (G-3)
- rabbit (G-1)
 ran (D, G-1)
 read (D, G-1)
 reading
 red (D, G-1)
 ride (D, G-1)
 right (D, G-1)
 ring (D, G-1)

rose (D, G-2)	stories	this (D, G-1)	was (D, G-1)
row (D, G-2)	story (D, G-1)	three (D, G-1)	water (D, G-1)
Ruth	subtract	time (D, G-1)	way (D, G-1)
said (D, G-1)	subtracting	to (D, G-1)	we (D, G-1)
same (D, G-2)	subtraction	today (D, G-1)	went (D, G-1)
saw (D, G-1)	Sue	together (D, G-1)	Wednesday (G-4)
say (D, G-1)	sum	Tom	weigh (G-4)
school (D, G-1)	table (D, G-1)	Tom's	were (D, G-1)
second (D, G-2)	take (D, G-1)	took (D, G-1)	what (D, G-2)
see (D, G-1)	tall (D, G-2)	top (D, G-1)	when (D, G-1)
seven (D, G-1)	Ted	toy (G-1)	which (D, G-1)
she (D, G-1)	tell (D, G-1)	tree (D, G-1)	white (D, G-1)
short (D, G-2)	ten (D, G-1)	truck (G-3)	who (D, G-1)
show (D, G-1)	than (D, G-1)	Tuesday (G-4)	whole (D, G-3)
sign (D, G-2)	that (D, G-1)	twelve (D, G-2)	will (D, G-1)
six (D, G-1)	the (D, G-1)	twenty (D, G-2)	with (D, G-1)
sixth	their (D, G-1)	two (D, G-1)	word (D, G-2)
snowball (G-3)	them (D, G-1)	under (D, G-1)	work (D, G-1)
so (D, G-1)	then (D, G-1)	up (D, G-1)	working
sold (D, G-2)	there (D, G-1)	use (D, G-1)	write (D, G-1)
some (D, G-1)	these (D, G-1)	used	writing
spent	they (D, G-1)	using	wrote (G-3)
squirrel (G-1)	thing (D, G-1)	wagon (G-2)	yellow (D, G-1)
stamp (G-3)	think (D, G-1)	want (D, G-1)	yes (D, G-1)
stick (D, G-1)	thinking	wanted	you (D, G-1)
store (D, G-1)	third (G-3)		your (D, G-1)

Using the Word Lists

The above lists of words are those which children are likely to meet in arithmetic in the first and second grades. If the teacher knows in advance what vocabulary is needed for comprehension in arithmetic, provision can be made for introduction of those words which are not yet part of the children's reading vocabulary.

While such lists may be helpful in bringing expected vocabulary to the teacher's attention, he must, of course, be alert to the vocabulary problems which are peculiar to the materials he is using. Reading difficulty involves more than vocabulary, but instruction in anticipated vocabulary may reduce the reading problem and may thus contribute to the understanding of arithmetic concepts.

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in reading and reading research.)

EDITOR'S COMMENT

Many primary teachers find that materials for the content areas are difficult because the children have problems with both meaning and reading vocabulary. Kerfoot's Basic Arithmetic Word Lists for First and Second Grade may aid in meeting vocabulary problems in arithmetic.

The use of any general vocabulary list must be adjusted to the previous learnings of the students and the specific material being used, as the author points out. If arithmetic is well taught, the meaning and reading vocabulary will be developed as arithmetic concepts are built.

While many common words—such as *left*, *show*, and *find* appear in Kerfoot's basic list, these words have special meanings in arithmetic and will require careful attention by the teacher.—T. C.

Improvement in the Language Arts: A Progress Report

by ROBERT WAYNE CLARK

READING IN THE secondary schools is still unexplored territory. Guideposts of research are almost non-existent and the secondary-school faculty that breaks ground in the field of reading is indeed pioneering." These are the opening sentences of an article by Dr. Margaret J. Early, Syracuse University, in *THE READING TEACHER*, April, 1960.

If the word explore is used in a sense implying controlled scientific investigation, then, so far as we know, the writer of that article was and is correct in saying that the field is unexplored. But, if the allusion to breaking ground may be taken in sufficiently literal sense to include a brash and determined assault upon the problem of inadequate reading skill in the senior high school, the writer begs to suggest that the title—or accolade—of pioneer be bestowed upon the staff of the Thomas A. Edison High School of Philadelphia. That staff has made a concerted effort to cope with the reading problem.

As a result of disquiet occasioned by generally poor performance in the language arts, the staff of the school conducted a survey of the language arts skills—reading comprehension, vocabulary, spelling, and English usage—of all eleventh- and twelfth-grade students late in the spring term in 1959. Appropriate sections of the Stanford Achievement Test, Ad-

vanced Battery Partial, were used and the results carefully tabulated.

No claim is made that the procedures in this survey, or in the subsequent project set up to cope with the condition the survey revealed, qualify either the survey or the project as carefully controlled scientific experiments. We investigated a condition, did not like what we found, and proceeded to develop corrective measures. Our concern was and is for the practical aspects of our project, and it is as practical school people that we make our report.

Tempting as it is to present at length the findings of the initial survey, it seems sufficient to our purpose here to point out only three of the most significant:

1. In all four aspects of the language arts tested, the scores achieved by the boys revealed extremely wide variation *within each grade*. The range of scores in several instances extended beyond eight grade levels.

2. In all four aspects of the language arts tested, the scores achieved by the boys revealed extremely wide variation *within each narrow segment of the mental ability distribution*. The range of IQ's, extending from below 70 to 150, was broken into ten-point segments and the scores distributed within each segment. As an example of our findings (quite typical), 11A boys with scores between 100 and 109 had a range of

scores in reading comprehension which covered seven full grade levels.

3. In no aspect of the language arts tested did there appear to be a consistent pattern of progress incidental to the pursuit of the normal high school curriculum. We found, for example, that the ranges of scores in all aspects of the language arts tested and *at all grade levels of the school* were closely similar.

The report of this survey was presented to the administrative cabinet of the school in September, 1959. In discussions there it became clear that any effective attack upon the problem would have to be on a narrower front than that represented by the four aspects of language arts initially tested. It was decided to concentrate on reading comprehension and English usage, and when the report was presented to the Board of Superintendents in October approval was asked for the following proposals:

1. That at the close of each term the school be permitted to administer to the entire student body a recognized objective achievement test in reading comprehension and English usage.

2. That the traditional grades of work in the English department be abandoned, and that in their place a series of levels largely based upon achievement in these two language arts be set up.

3. That, irrespective of normal grade placement, each boy be assigned to the level of instruction indicated by these achievement scores.

4. That a special appropriation

be given to the school for securing books and materials adapted to the needs of retarded readers.

5. That the Superintendent approve for the entire staff of the school an in-service course in the techniques of improving reading comprehension, provide in-school time for the course, and provide the services of reading specialists in the number necessary to conduct the course.

These requests were granted; the Curriculum Office provided guidance, assistance, and specialized personnel; and the project was launched about December 1, 1959.

This may be a good point at which to indicate briefly some general characteristics of the student body of two thousand boys with whom this project is being carried forward. The age range is unusually high, running from fourteen to above twenty years, well over 90 per cent of the boys being over-age for the grade.

About 50 per cent of the students are Negroes and there is a liberal sprinkling of Puerto Ricans. The remainder of the school is composed largely, though not entirely, of immigrant stocks representing pretty much an ethnological sample case of eastern Europe and western Asia. These boys, both Negro and white, come from all social groups, but among them are found many broken homes, much family mobility, much public dependency, and little encouragement to cultural or economic improvement. The I.Q. range is wide (from below 70 to 150), many boys being content to do little or

nothing, many apparently ungifted explaining in a burst of confidence how they deliberately did badly in mental ability tests so that less work would be expected of them. It seemed certain to us that a very large percentage of the boys were performing well below the level of their real ability.

It was our hope that if we could challenge these boys whose backgrounds have conspired to dull their ambitions, if we could challenge them at a time when there was still an adolescent drive to be somebody, to rise above the level they had previously known, we might then hope to raise the reading comprehension level and, with that to open eyes and extend horizons, be of real educational service to them.

It will be readily recognized that it was necessary for the school to proceed with this project with no more definite blueprint than that suggested by our hope and our purpose. Our plan, therefore, was drawn in broad general outline and modifications were introduced as necessity for them appeared.

The reorganization of the English department was effected readily and with the enthusiastic cooperation of the English and remedial reading teachers. Seven levels of instruction were provided. Six of them, designated by the letters F to A, represented what we hoped would be an orderly progression in language arts skills. The seventh level, designated by M for Modified, was reserved for those boys whose skill was so lacking as to indicate need for very special-

ized help. It was agreed that, at least during the first terms of the experiment, our organization must be sufficiently fluid to permit the shifting of boys from one level to another as fuller evidence of achievement became available to the teachers.

In effecting this reorganization it was necessary to face the problem of "credit" for English. On this point it was agreed that any student successfully completing the work of the instructional level to which his achievement assigned him should advance to the next level and be given credit for the grade of English to which he would have been assigned if the reorganization had not taken place. This meant quite literally that three boys sitting in the same class and doing the same work might be credited, respectively, for English 3, 4, and 5. Some staff members objected that the boys would not be "covering the work" of the grade. The decision indicated above rests on these staff convictions: (1) No boy can learn what he can't understand, (2) Learning must start where the boy is, and (3) An employer or a college admissions officer wants the prospect to have sufficient skill for the task he faces rather than assurance that the prospect has gone uncomprehendingly through the requirements of a formal course of study.

Assignment of boys to the proper levels of language arts instruction also presented problems. As we might have found by examining the distributions of our 1959 survey—and as we should certainly have suspected

from acquaintance with the cultural backgrounds of our boys—the grade-level scores achieved by the same boy in reading comprehension and in English usage frequently varied widely. To these two objective scores, therefore, we added the score achieved in a Listening Test. Each teacher read to the class a paragraph which was considered to be adapted in length and difficulty to the particular grade level. The teacher then instructed the boys to report the content of the paragraph in their best English. The score, expressed in percentage, was, of course, influenced by the teacher's general judgment of the boy's performance. Results seem to indicate that this modification of our original plan was wise.

The moderate "special appropriation" provided to the school was used to secure textbooks and reading materials which we hoped would have special appeal for the less skilled reader. As the project got under way, however, we observed great reluctance on the part of these less skilled boys to do free reading of any sort. To meet this situation our department head in English set up a Browsing Center in a classroom temporarily unused. In the bookcase of this room were placed some ninety books which had been selected because their content was of special interest to the boys and because their style and vocabulary placed them well below the frustration level of all but the most unskilled. Classes at each of the lower instructional levels—Modified, F, and E—were taken to the Browsing Center one day each

week, and each boy was permitted to select and read any two books as a part of his class work during the term. No formal book reports were required. When time permitted, the boy told his classmates or a small group of them about the book. An alternate practice was to permit a brief check-list type of report. Teachers generally report highly successful experience with the Browsing Center, many boys voluntarily, some enthusiastically, exceeding the reading requirement.

It is interesting to note at this point that the attitude of all of the boys was in general quite constructive. During the administration of the Stanford Achievement Test in late December and early January they were highly cooperative. There was also no case in which an outraged upper classman demanded to be removed from a class in which his fellows were largely from the tenth grade, although it should be added that the distribution of the boys among the new levels brought into each class boys of at least four traditional (one-half-year) grade levels. It is also significant to report that on the day in June on which we administered a second form of the Stanford Achievement Test to determine progress during the first term, our absentee list contained a hundred fewer names than on either the day preceding or the day following.

The in-service course for the teaching staff was inaugurated on January 12, 1960, with a three-hour session centering in a demonstration lesson conducted by a member of the staff.

The Associate Superintendent in charge of Curriculum was present along with the District Superintendent of Schools. The Assistant Director for Reading helped to prepare for the session and led the discussion which followed the demonstration. For a second three-hour session about two weeks later, as well as for five shorter sessions spaced through the spring term, the staff was divided into five segments to each of which were assigned teachers of subjects which appeared to present reasonably common problems in reading comprehension. These five subject groups were: English and Foreign Language, Mathematics, Social Studies and Commerce, Science and Health Education, and Shop, Mechanical Drawing and Art. For each of these segments a specialist in remedial and developmental reading at the senior high school level was secured. In addition, the director of the city-wide public school reading clinic and the Assistant Director for Reading from the Curriculum Office gave invaluable assistance.

In a report as brief as this it is most difficult to appraise properly this in-service course. The staff—all subject specialists and many confirmed in their teaching patterns by years of service—accepted the new responsibility with little complaint, and soon its members found themselves engrossed in the new project, some of them becoming highly enthusiastic. Our reading specialists planned as the project unfolded; and thus produced for us an in-service experience

much nearer to our actual needs than conscious preplanning could have produced. This experience reflected itself in all classrooms and shops. Everywhere there was an exploration of text materials and instruction sheets for obscure words, or words easily misinterpreted — exploration often followed by revision. Everywhere the unfamiliar vocabulary of the new assignment began to appear on the blackboard before the assignment began. Everywhere teachers were correcting students' misconceptions in phonics as they were reflected in spelling and in pronunciation. Everywhere students and teachers alike concentrated first attention upon the vehicle which must carry subject matter meaning from one to the other. When the first term of the project closed, well over two-thirds of the school staff requested the continuance of in-service training for at least one additional term.

It remains to report the results of our first term, to indicate next steps now contemplated, and perhaps to point out certain implications of our findings.

As originally planned the Paragraph Meaning and English Usage sections of the Stanford Achievement Test, Advanced Battery Partial, Form KM* were administered to all students of the school on June 1, 1960, absentees being tested as soon thereafter as possible. This was almost exactly four calendar months after work on the project began.

*Form JM was used in January, 1960; Form LM will be used in January, 1961.

It is not our purpose in this report to present an exhaustive catalogue of findings. This is a progress report on a subject that has barely begun. Briefly, our results as of June reveal that there has been a shift in scores from the lower to the higher end of the distribution in both Paragraph Meaning and English Usage.

As we had come to anticipate, the progress in English usage has not been marked. As the early months of the project went by, it became apparent to all of us that, with the rest of the school operating normally, an attack even on the two aspects of language arts—comprehension and English usage—taxed both our capacity for planning and our skill. Since our first concern was for reading comprehension, it was in this direction that we concentrated most of our effort. Any small progress that may have been made in English usage, therefore, must be considered to be incidental to the normal teaching of composition and foreign language, with perhaps some stimulation from the special grouping in the English department. The median scores in English Usage did increase for all grade levels, the range being from 0.1 to 0.6 grade levels,[†] with the increase in the median score for the school being 0.2 grade levels. If our initial survey had indicated consistent improvement in usage skills as an incidental advantage of the high school curriculum, we would be com-

elled to view these meager results as evidence of failure. Since it did not, we are in the process of drawing plans for a more effective attack on this front, related as closely as possible to that on the problem of reading comprehension.

And it is in the area of comprehension that our efforts appear to have been measurably successful. The median score in the Paragraph Meaning test increased for each class, 10B through the June graduating class, the range being from 1.4 to 2.0 grade levels,[‡] with the increase in the median score for the whole school being 1.5 grade levels.

We do not, however, attempt to appraise the success of the initial stages of our project in terms of statistical data alone. We can see the alertness that brought a hundred more boys in promptly on test day reflected in student attitudes toward all sorts of tasks. Our findings show incredible—almost astronomical—gains in the scores of some boys. Such gains cannot reflect actual improvement in skill, for in some instances they amount to five or six years gain in four months. What it can and probably does reflect is the boys' resolution to use the skill already developed because of the school-wide pressure to do so. Indeed, we cannot be sure at this point how much of what appears to be a spectacular general improvement in reading comprehension is due to this same

[†]By classes the gains in median scores were: 10B—0.6 grade levels, 11A—0.3, 11B—0.3, 12A—0.4, 12B—0.3, and June graduates—0.1. These classifications are as of July 1, 1960.

[‡]By classes the gains in median scores were: 10B—1.4 grade levels, 11A—1.6, 11B—1.4, 12A—1.6, 12B—1.6, and June graduates—2.0.

resolution in the face of pressure and how much is due to the acquisition of new skill.

As this report is written, our Language Arts Committee, consisting of the school librarian, a counselor, two remedial reading teachers, one teacher from each subject department, and one of our vice-principals who acts as chairman, is perfecting plans for our in-service course for the current school year. A subcommittee is preparing a series of "tip" sheets designed to keep all teachers alerted to the simpler techniques involved in the improvement of reading in each particular subject field. At the same time a committee of English teachers is drawing a schedule of minimum essentials in English usage for each of the levels of instruction. Another committee assisted by the school librarian and the assistant director of Library Service is undertaking a careful classification according to reading difficulty of all new acquisitions by the library, as well as of a large part of the collection already there.

Had we been fully aware of the complexity of the task we undertook—or of the rare opulence of our own ignorance—it seems highly likely that we would never have initiated our project. None of us on the staff of the Thomas A. Edison High School could qualify as a reading expert,

and probably none of us is capable of evaluating with complete accuracy the results we have thus far achieved, or of appreciating fully their implications. It is pleasant to speculate that Daniel Boone, also a pioneer, might never have reached the great bend of the Missouri if he had had full knowledge of what lay ahead of him.

Despite our limitations and the imperfections in our procedures—which must be obvious to the expert—we have no hesitation in inviting other high school staffs to pioneer with us. We know that our boys have begun to improve their reading. We also know that all of us have learned a great deal which will help us to employ more refined techniques and sharpen our attack. In any case, our project is new; there is much to be done to perfect it; and we can always send another report if one seems justified.

(Dr. Clark is Principal of the Thomas A. Edison High School in Philadelphia, and he reports that "I am afraid this project grew out of the fact that I was sure the boys were performing far below capacity level." Remembering his description of the student body in his present school, it is interesting to note that he earlier held the vice-presidency of another high school, which he describes as "exclusively high-level academic.")

The Problem of Vocabulary Load In Individualized Reading

by PATRICK J. GROFF

WITH THE emergence of the popularity of the individualized approach to teaching reading, a whole new dimension has been added to the problem of reading vocabulary control. Using group methods, the teacher, if necessary, could cautiously move groups of children from one basal reader series to another, assured in advance of precisely which words were new and assumed to be likely to cause recognition problems. Under individualized reading, quite to the contrary, each child reads through different basal reading series and trade books as his abilities, interests, and energies lead him. The teacher counsels him individually and provides the widest possible range of choice in books. One of the keys to the success of the individualized reading approach, and a crucial problem for the teacher using the method, is implied in this rather innocent-appearing statement, however. This critical issue is how to establish procedures by which the child can quickly discover, largely through his own developing powers of self-selection, the books he can read and will find satisfying. What must the teacher know and do in advance? This question becomes especially pressing to the primary grade teacher who often guides children with few well-established reading skills.

In the field of trade books, the non-textbooks, or library books as

they are more commonly called, remarkable efforts by many publishers are being made to provide easy-to-read or beginning books for first-grade children. No longer need the first-grade teacher who contemplates initiating individualized reading be concerned lest there not be enough materials available at this very primary level. Many of these delightful and creative books, in addition, include the number of different words presented inside their covers, which indicates somewhat their difficulty. A good reference volume, e.g., the *Children's Catalog (1)*, which can be found in all libraries, will give further help in determining the reading difficulty of books for second-and third-grade children. The Wisconsin State Reading Circle Board (9) publishes excellent annual lists of carefully selected books arranged at reading grade levels one through eight.

In the field of reading textbooks the research that analyzes the vocabulary load of these books gives much useful and necessary information for the teacher using individualized reading. In the last decade several of these detailed studies provided the core words that apparently are necessary for reading success in primary readers, and probably in the easy-to-read trade books. Sisters M. Dorothy and Rita Cecile (2) searched through twenty preprimers and discovered such a core vocabulary.

They also calculated the total number of different words in each pre-primer studied, the number of words every pair of different preprimers have in common, and the percentages that these words common to different preprimers represent. Groom (4) lists the overlap in words found in any two preprimers in a list of twenty-four. The thirty-five words found in 50 per cent or more of these preprimers are given. All 318 different words found in the preprimers are indexed as to the preprimer in which they are found. Through an extremely extensive analysis, Kearney (5) found the thirty-four words that commonly occur in 50 per cent of forty-two preprimers studied; the 167 words common to 50 per cent of thirty-eight primers; the 340 words common to 50 per cent of forty-one first readers; and the 148 words common to all of these 121 books. The most common 125 words that appear in nine or more preprimers were uncovered by Gentry (3). She arranged the titles (including authors and publishers) of sixty-six preprimers according to the percentage of words found in them from her Common Word List of 250 words. From the words found in seven widely-known primary reading series (preprimers, primers, and first readers), Reeve (7) determined the 150 words that are common to all of these books. She also established the 115 words that appeared in all the preprimers she studied. Knipp's excellent compilation (6) collates a vocabulary list of 2,646 different words divided into five levels for individual words,

phrases, and sentences. Her list includes words from the Dolch lists, the Gates Primary List, the Thorndike List of 20,000 Words, the Dale List of 3,000 Familiar Words, and Stone's list of 1,916 Words for Primary Reading.

Lists of words such as these reveal the core of words that the child will meet repeatedly, regardless of the basal reader or trade book he happens to be reading. It behooves the teacher of individualized reading to emphasize these words in any kind of word recognition drill that is conducted. Some teachers want to make sure the child has many of these words in his sight vocabulary before he begins his independent reading.

It is apparent, however, from a review of the above studies that even if a child reads from only the half-dozen or so best known or widely-used series of readers, the overlap of words common to all these books will be little more than 20 to 25 per cent at best. Vollbrecht (8) made this clear. She showed, for example, that only eighty-eight words (out of a total of 1,914) found in the thirteen second-grade readers she studied were common to six of the different books; with only sixty-eight words common to seven books. The largest number of words found common to any two readers was 342.

While the above studies reveal that readers have different vocabulary loads, further information about the rate of word introduction and total vocabulary load in individual readers is obviously necessary. Teachers using individualized reading badly need

this kind of information. Tables I and II give the total number of different words that each book in twelve well-known primary reading series contains. To determine how many new words are introduced in any given book, subtract from it the number found in the book at the next lower level. For example, Winston

Preprimer 1 introduces ten words; Preprimer 2 of this series introduces twenty more words for a total of thirty different words in that book. Assuming that, in general, the book with the smallest number of different words is the easiest to read, these tables give an approximation of the

(Continued on Page 194)

TABLE I
DIFFERENT WORDS IN PREPRIMERS AND PRIMERS

PP-1	PP-2	PP-3	PP-4	P
W-10	W-30	W-51	RP-78	M-121
A-12	A-32	A-54	LC-85	W-134
M-14	LC-34	LC-55	H-112	A-154
BM-16	BM-36	G-56	AB-*	G-155
LC-16	SC-38	BM-58	A-*	SF-158
SF-17	M-40	SF-58	BM-*	AB-158
G-19	AB-42	HM-60	G-*	BM-160
AM-20	G-42	AB-63	HM-*	RP-180
RP-20	RP-46	RP-67	L-*	LC-184
AB-21	HM-50	H-95	M-*	HM-210
H-22	H-52	M-*	SF-*	L-245
L-34	L-90	L-*	W-*	H-311#

TABLE II
DIFFERENT WORDS IN READERS I-III

I	II-1	II-2	III-1	III-2
M-235	M-372	M-584	RP-866	W-1122
W-280	RP-430	W-931	W-931	M-1342
A-307	A-490	W-682	M-947	A-1359
G-326	W-493	A-719	A-1021	RP-1411
			BM-1091	
SF-335	AB-547	AB-751	G-1110	G-1457
BM-336	G-552	G-775	AB-1121	AB-1480
AB-340	SF-564	LC-816	HM-1246	LC-1579
LC-347	HM-598	HM-822	LC-1247	HM-1678
	BM-642			
HM-374	LC-642	RP-826	SF-1280	SF-1776
RP-375	H-718	SF-879	H-1479	H-1916
H-456	L-888	H-1043	L-1484	BM-*
L-477		BM-*		L-*
		L-*		

*-No book at this level.

AB-Allyn and Bacon

A-American Book

BM-Bobbs Merrill

G-Ginn

H-Heath

HM-Houghton Mifflin

-Two primers.

L-Laidlaw

LC-Lyons and Carnahan

M-Macmillan

RP-Row Peterson

SF-Scott Foresman

W-Winston

Historical Fiction for Children

by LELAND B. JACOBS

TODAY THERE is a sizeable body of literature for children known as "historical fiction." It is of two kinds. First, there is fiction which, when it was written, was contemporaneous, but with the passage of time has taken on an aura of the historical. Books like *Little Women* and *The Adventures of Tom Sawyer* are examples that come quickly to mind. By having lived well beyond their time of writing, for today's readers they seem to be historically oriented. One, however, never gets from such books a feeling for other than immediacy, since the writer's intent—and the very stuff of life with which he worked—was at the point of being an eyewitness.

On the other hand books like Elizabeth Coatsworth's *The Golden Horseshoe*, or Esther Forbes' *Johnny Tremain*, or Carol Ryrie Brink's *Caddie Woodlawn*, or Cornelia Meig's *Wind in the Chimney* are, in total conception, historical fiction. Written contemporaneously, they explore times which their writers never knew except through research and the use of their creative imagination. Such stories as these are the true historical fiction, with which we shall be concerned here.

Significance of Children's Historical Fiction

Historical fiction is an important genre for children for several reasons. It has a romantic appeal—the appeal

of what was and cannot be again. It has novelty—the novelty of difference in food, clothing, shelter, customs, recreation, even language. It has satisfying themes: adventure, mystery, home and family life, migration, for instance. It provides colorful backdrops—log cabins, forts, sailing ships, covered wagons, Indian villages, and the like. In other words, there is much about historical fiction to capture and hold the young reader's interest and whet his appetite for the printed page.

But historical fiction can have yet greater significance for the boy and girl in the later elementary grades particularly. It can give children as no other kind of medium quite can, the intimate feel of living in another time. Through identification with appealing characters, the child not only views the happenings, he also sensitively vicariously experiences them. He vividly can feel the fact, the tenor, the spirit of a time now long gone. He can join with people living out their destinies in circumstances which he would otherwise never know, be involved in their attempts to make life good. Thus involved, the child knows the times, for a little while, as his own and comprehends them not as interesting historical settings and events but as vibrant moments of immediate reality.

Another significance of historical fiction is the sense of continuity, through time, of the meaning of the

human enterprise, both in the material and non-material culture. From identification with the characters and happenings in historical fiction, the needs of a human being, physically, mentally, emotionally, socially, and spiritually, are seen as having their urgencies then as now. Thus the child gets some feel for his kinship not only with men but also with the pulse-beat of mankind. Life, in its continuous flow, period into period, generation to generation, is illuminated, and alone though one may be in the flesh, he is inextricably related to those who walked their lone ways, with others, in the past. For a child, through fiction, so to feel his place in the great sweep of human destiny and link it with others now gone is a big, big experience, one that both enlightens and matures the beholder.

Historical fiction, at its best, may give the young reader a developing invitation to judgment upon the past, a perspective on today through yesterday. "The good old days" clichés may not be so rosy—exciting, yes, and vigorous and vital, but different rather than better. There is, of course, little place for a "debunking" approach to the past in children's books—an approach sometimes used effectively in adult historical fiction—but there surely is a place for the clear, unsentimental look at life, set down with scrupulous validity. When the child reader encounters such books, which treat life as authentically as possible, the past is seen for what it is—the best that human beings knew how to do, given their times and circumstances. Which also

gives meaning to the present. Facts and events find their significance, then, in the flow of life, in the inspiration of man's ability to wrestle with his fate.

Pitfalls in Historical Fiction

Not all historical fiction currently available for the young deserves the plaudits of the discriminating. For, in the writing of historical fiction there are some real pitfalls, any one of which may so affect the total book that the result is an inferior work.

Picturesqueness is one such pitfall, in which the writer gets carried away with quaint clothing, unusual customs, and oddities. If these become the focus of the book rather than life-like characters living the events of the story, the writer is untrue to the spirit of the genre. And he is untrue to the times, for by drawing undue attention to that which is strange to the present-day reader, he is forgetting that these things were not strange in their own setting. Wooden characters and contrived plots set against lavish period backdrops are neither good fiction nor good historical perspective.

Another pitfall is inaccuracies. The writing of good historical fiction entails research—research frequently on small details which, while not of great worth historically, are essential to the telling of this particular story. There are various kinds of inaccuracies—those of time sequences, of geographical settings, of cultural artifacts. Important as the avoidance of such inaccuracies is, the greater inaccuracy is that of being unfaithful

to the spirit of the times—the social milieu, the beliefs and motivations, the values held, the methods of child rearing, for instance. If the characters behave as moderns, all dressed up in their historical costuming, then the children are badly misled. And if one has to choose between anachronism and versimilitude, undoubtedly the anachronism is the lesser indignity to the young reader.

Another pitfall is that of language used. In order to create a sense of living in the past, the speech patterns, the nomenclature, the dialects, the general language employed must in some way be suggested in the story. However, too heavy a burden of unfamiliar words, or dialect that is so thick that it cannot really be read will surely deter the reader. And modern speech patterns dressed up in old words are no credit to the writing. A neat balance is needed in the use of language which suggests the times being re-created so that the reader catches the flavor if not the full savoring of the actual language of the period.

Facts and information may also be a problem. Through the extensive research which the writer frequently does for a piece of historical fiction, he learns a great deal more than can possibly be used directly on the printed page. Because he knows so much, there is the temptation to put into his writing more facts and information than are essential to the telling of his story. Or he may be tempted to concoct a plot and characters as mere vehicles for his information. In either case the fiction

suffers, in the first instance from excess baggage, in the second from contrivance and lifelessness.

Evaluating Historical Fiction

Such pitfalls as have just been discussed in themselves suggest not only what should not occur but also what historical fiction at its best will do. Critical appraisal of historical fiction is, of course, not mere fault-finding. Criticism involves the sympathetic look into what the writer seems to have tried to do and to appraise (bringing one's own perceptions and values to bear on the book) wherein the writing is the better and wherein, in terms of what seem to be the writer's intentions, the writing might have been strengthened.

Historical fiction is, in certain respects, no different from any other kind of fiction. The story must move through genuine conflict to reasonable climax to plausible resolution. The characters must be convincing. The writing must be original and effectual. But, in addition, the genre has some unique characteristics, which make it distinctive as prose fiction. In appraising historical fiction for children, one may well ask himself:

Is the story truly historical in nature, or might it as well have been told in a modern setting?

Is the spirit of the story authentic and is the information accurate?

Is the story tone realistic, free from romanticizing and sentimentalizing the past?

Does the story utilize historical settings, events, and personages for

the creation of a picture of the past that centers in a child character's realization of life rather than as ends in themselves?

Is the historical information included that which is truly essential to the behavior of the characters rather than interesting in and of itself?

Are the real historical personages included vitally necessary to the telling of the story?

Are the motivations and the behavior of the characters appropriate to the influences of the times in which they live?

Does the story illuminate life and living in the past in such ways that it raises the sights as well as stirs the

imagination of the young today?

In his essay on "History" Emerson wrote: "All that Shakespeare says of the king, yonder slip of a boy that reads in the corner feels to be true of himself."

The heightened moment of sensitivity for the reader of fine historical fiction is that in which he feels himself *in* and *of* the past and is the bigger today for having been with yesterday.

(Dr. Jacobs is a Professor of Education at Teachers College, Columbia University. As a well known authority on children's literature he has contributed several articles to this journal.)

(Continued from Page 190)

difficulty level of all the primary grade readers listed. The teacher of individualized reading might code the difficulty of these books by a spot of different colored tape on the inside cover of each book. Green tape on a second-grade reader might indicate the book has the lightest vocabulary load of any second reader. Red tape on a second reader might indicate that this book has the greatest number of different words. These color clues would be made known to the child, who could find them helpful in choosing a book he could read with comfort and satisfaction.

(The author received his Ed.D. degree in 1955 from the University of California and since that time he has taught courses in elementary school reading, language arts, and children's literature at San Diego State College.)

References

1. *Children's Catalog*. New York: H. W. Wilson Co. Published yearly.
2. Dorothy, Sister M., and Cecile, Sister Rita. "A Vocabulary Analysis of Recently Published Preprimers," *Journal of Educational Research*, 40 (Oct., 1946), 116-25.
3. Gentry, Lillian. "A Study of the Vocabulary Load of Sixty-Six Preprimers," *Journal of Educational Research*, 43 (Mar., 1950), 525-32.
4. Groom, Irene D. *The Vocabulary Overlap of Twenty-Four Preprimers*. Des Moines: The State of Iowa, 1947.
5. Kearney, Nolan C. "An Analysis of the Vocabulary of First Grade Reading Material," *Journal of Educational Research*, 43 (Mar., 1950), 481-93.
6. Knipp, Helen B. *Basic Vocabulary, Phrases and Sentences for Early Reading Instruction*. Meadville, Penn.: Keystone View Co., 1952.
7. Reeve, Olive R. "The Vocabulary of Seven Primary Reading Series," *Elementary English*, 35 (Apr., 1958), 237-39.
8. Vollbrecht, Dorothy M. "Vocabulary Analysis of Thirteen Second Grade Readers," *Elementary English*, 31 (Apr. 1954), 206-207.
9. Wisconsin State Reading Circle Board. *Wisconsin Reading Circles*. Madison: Wisconsin State Department of Public Instruction. Published yearly.

The Tape Recorder in Training Reading Teachers

by ARTHUR V. OLSON

THE TAPE recorder can be a valuable teaching aid in helping prospective teachers to better understand the complexities of the reading program and the methods by which effective teaching is done. The tape has several advantages.

First, it can bring the children into the classroom for the students to hear what is going on at any grade level. One of the basic problems of teacher-training, both for the secondary and elementary level, seems to be making the student aware that reading is a developmental process. By using the tape to give concrete examples of how skills such as comprehension and word analysis are developed, the students can become aware of this development and get a general overview of the reading program. It would be desirable for them to observe actual classrooms in progress. In college classes, however, the tape has some advantages over actual observation. It allows the instructor to pause, interject a thought, or discuss something which has been heard and, if necessary, repeat the material.

A second advantage lies in the use of the tape in presenting methods of reading instruction. A student can hear a teacher presenting a directed reading lesson with the steps clearly indicated. The students can listen to the children reading orally, evaluate the type of questions which the teacher asks to develop comprehen-

sion, and, in general, have a better understanding of the factors which the instructor has discussed in class. If, for example, comprehension were discussed, the instructor might raise the question whether the teacher, in her presentation on the tape, had asked questions which require not only a remembering of details, but also the ability to generalize, draw conclusions, see relations, etc. At times, during the oral reading section of a lesson, the tape can be stopped and questions asked of the students as to what they would say or what they would do if a similar situation arose in their class. Let's suppose, for example, a child has come to a word in his reading which he does not know. Stop the tape. Ask the students how they would help the child to unlock the strange word. This would mean, of course, that the students would need to have a copy of the material which the child was reading.

One of the greatest problems that a new teacher faces is deciding the level at which instruction in reading should be carried on. She often has information from the previous year but it is not always accurate. The use of the tape affords the college instructor an opportunity to guide his students in an evaluation of the child's reading. It enables the students to hear what the reading sounds like at the independent, instructional, and frustration levels so

that they can identify these levels when they are teaching.

A third advantage of the tape is to help students in the recognition of reading weaknesses which some children have so that added help may be given them before they become seriously disabled. Through listening to children read it is possible for students to recognize the errors made and to classify them so that a pattern begins to form which can be translated by the classroom teacher into corrective measures. By having the students listen to the errors, and by pointing out to them the factors which should be observed, the students can be made more sensitive to children's reading needs. This technique has the advantage of being real enough so that each student is immediately involved in an active role.

A fourth advantage of the tape is that it can be used as a tool to evaluate the students. What better way to find out how well students have integrated their knowledge about reading than by presenting them with a real situation via the tape and asking, "Now what would you do?"

The tape is indeed a valuable aid in a teacher-training program. It takes time to correct the material and edit it, but the results are rewarding. The students have a better understanding of the techniques of teaching reading as a result of the chance to use their knowledge immediately.

(*Arthur V. Olson is an Assistant Professor of Education at the University of Maine and Director of the Reading Clinic. He has used a tape recorder for three years in his own classes.*)

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What RESEARCH Says to the Reading Teacher

BY

AGATHA TOWNSEND
Consultant, Educational Records Bureau

Evaluating Reading Tests

How do you evaluate reading tests for inclusion in the measurement program for an elementary school, a high school, a college? "Where can I find out about reading tests for use in a freshman placement program? Where can I locate a listening comprehension test? How many forms of X test are now available? I am considering it for use in testing and retesting for a remedial program." This is a sampling of questions with which the test specialist is faced day after day. Some of them, obviously, could be answered very readily with access to a recent catalog of the publisher of his test. Others undoubtedly could be answered only after knowing a great deal more about the specific purposes which the questioner has in mind, the grade level and reading problems of his students, the funds at his disposal, or even his familiarity with objective testing in general and his background for the wise use and interpretation of test results.

There is, then, no one reference which will provide all the answers to questions about test selection and use, even in one specific field such as reading. There are, however, certain standard sources with which any reading teacher should be ac-

quainted, so that he may find, on the one hand, authoritative opinion about the usefulness of a test, or, on the other, guidance in the interpretation and follow-up of test records, advice on the establishment of a testing program in reading skills, or help in the proper use of tests in a research project. Eight of these sources are listed in the References accompanying this column. In the remaining space an effort will be made to point out the uses for which each reference is designed and the type of material which it features.

The best known reference on the selection of reading tests will undoubtedly prove to be the current edition of Buros. This series—which has achieved the distinction of being known by its producer's name, like Dun and Bradstreet or Webster's—is represented in the bibliography by *The Fifth Mental Measurements Yearbook* (1). It is, in essence, a comprehensive listing of current tests with reviews written by specialists in the subject field covered by the test, or by measurement experts, or both. The reading teacher should be cautioned that the fact that the Fifth Yearbook is the most recent does not mean that it supersedes earlier volumes. Certain tests which are in

wide use, but which have been in print for a number of years, may not be reviewed in the 1959 edition, and should be sought in the Fourth Yearbook. Useful as it is, Buros should be approached with some caution. Remember that a test reviewer may be applying criteria to the test which reflect *his* needs, not *yours*. Every effort is made to include reviews representing different points of view, but use of the Yearbook should not preclude careful judgment in interpretation. Sheer accessibility of test listing is extremely important, however. Nowhere else can one locate in a single reference as complete information on the sixty or more tests reviewed under the main heading of reading.*

Is test selection the beginning or the end? For many reading specialists it is a final step in a process which begins with the problems observed in a classroom or clinic. For teachers, also, it is important to put the whole matter of objective testing in perspective. Perhaps the problem is one for which tests have not been designed. We have, for instance, relatively few good tests of interest in reading, a field in which other types of instruments seem to be more useful. One major reference which should be required reading for its measured, sane, and highly expert articles, is the section on Reading in the *Encyclopedia of Educational Research* (2). The fifty pages devoted to reading

are actually made up of three articles by William S. Gray, and references to tests and to research in which tests have been applied are found frequently in the last two: *Physiology and Psychology of Reading*, and *The Teaching of Reading*.

Other summaries of research are valuable for the same reason—the illustrations given of skillful uses of tests, and the experimental work seeking to validate new tests in actual school and clinical situations. Most of the current research in reading, including research in testing, is covered in the annual instalments of Dr. Gray's "Summary of Investigations Relating to Reading" (3). Summaries which cover several years of such research may give perspective in which current studies may be seen. Annotated summaries are provided in such a volume as Traxler and Jungeblut, *Research in Reading During Another Four Years* (7). In this, which is the latest volume of a series now summarizing research for a period of almost thirty years, it may be noted that there are twenty-six references under the heading for Reading Tests and Testing Procedures derived from research reported in the interval from 1953 to 1957. Approximately every three years the American Educational Research Association also summarizes reading research. The latest such summary was prepared by Constance M. McCullough in 1958 (4).

Textbooks and general works in the teaching of reading are a fourth major source of information about reading tests. It would extend this

*A more extensive review of the *Fifth Mental Measurements Yearbook* appeared in this column in the December, 1959, issue of *The Reading Teacher*, Vol. 13, No. 2, pp. 145-48.

column far too much to seek to list even representative good texts which include such sections. As an illustration, however, mention might be made of Strang, McCullough, and Traxler, *Problems in the Improvement of Reading* (5). The chapter on testing is unusual in that it considers both teacher-made and published tests and from this background discusses the usefulness of both. The list of tests includes data on forms, grade range, publisher, and so forth. As annotations do not accompany the reference list, these should be sought in the text itself. A recent text which is unique in that testing of reading skills forms a large part of the framework of the teaching program suggested is Triggs, *Reading: Its Creative Teaching and Testing* (8). An appendix includes virtually all reading tests now in print and gives a list of test publishers with their addresses.

Since measurement is, of course, a field with a very substantial bibliography of its own, the reading teacher should not overlook general books on tests and testing programs, statistics, and guidance. For example, a

fully annotated list of reading tests occupies a section in Traxler's *Techniques of Guidance* (6). Such references can help the reading teacher realize that testing in one field can be best thought of as part of the combined operations needed if measurement and evaluation are to play their full part in improving the instructional program for all students.

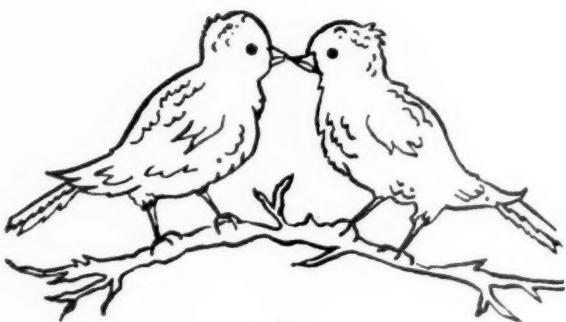
References

1. Buros, Oscar K., ed. *The Fifth Mental Measurements Yearbook*. Highland Park, New Jersey: Gryphon Press 1959.
2. *Encyclopedia of Educational Research*, Third Edition. New York: Macmillan, 1960.
3. Gray, William S. "Summary of Investigations Relating to Reading, July 1, 1958 to June 30, 1959," *Journal of Educational Research*, 53 (Feb., 1960), 203-222.
4. McCullough, Constance M. Chapter III, "Reading," *Review of Educational Research*, 28 (Apr., 1958), 96-106.
5. Strang, Ruth, McCullough, Constance M., and Traxler, Arthur E. *Problems in the Improvement of Reading*, Second Edition. New York: McGraw-Hill, 1955.
6. Traxler, Arthur E. *Techniques of Guidance*, Revised Edition. New York: Harper, 1957.
7. Traxler, Arthur E., and Jungeblut, Ann. *Research in Reading During Another Four Years*, Educational Records Bulletin No. 75. New York: Educational Records Bureau, 1960.
8. Triggs, Frances O. *Reading: Its Creative Teaching and Testing, Kindergarten through College*. New York: Privately published by the author, 1960.

To IRA Members

For some time IRA has been a member of the World Confederation of Organizations of the Teaching Profession (WCOTP). Because of the great flood disaster in a large part of Central Luzon in the Philippines, WCOTP is presently making a world-wide appeal to assist its Philippine members. Nearly twenty thou-

sand teachers were left almost destitute by the most destructive flood in Philippine history. Please be as generous as you can in their time of need. Contributions in cash and/or materials may be sent to: Mr. Ricardo Castro, Secretary General, PPSTA, 1280 Burgos, Paco, Manila, Philippines.—Mary C. Austin



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Interesting BOOKS for the Reading Teacher

BY

HARRY T. HAHN

Oakland County Schools, Michigan

Research Involving Teachers

BARNES, JOHN B. *Educational Research for the Classroom Teacher*. New York: Putnam's, 1960. Pp. 229. \$4.00.

Dr. Barnes' provocative and exciting text is meant for teachers who are interested in the possibilities of finding the solutions to some of their classroom problems through the application of simple scientific methods. It is for teachers who have not been trained in statistics but who are desirous of discovering new opportunities for problem centered, creative teaching experiences. It is for teachers who believe that we must bridge the gap between research and our teaching practices.

Dr. Barnes introduces teachers to a kind of instruction which is research-oriented, and then skillfully and effectively shows his audience how they can become actively, and possibly enthusiastically, involved in research.

This is a unique and valuable text because the author points the way to building much needed confidence and security; he persistently avoids taking that one step beyond into the area of advanced statistical theory where many feel inadequate. Educators who have viewed research with fear and awe, possibly inspired by introductory courses and advanced texts on this subject, will be pleased with this new book. Much

of the text is devoted to examples of systematic and organized research conducted by industrious teachers.

Dr. Barnes identifies three areas of research opportunity for classroom teachers. These are: (1) studies of individual children, (2) studies of classroom groups or sub-groups, (3) studies of the teaching and learning process. He uses one or more interesting case studies for specific teaching examples in each of these areas. Reading teachers may be particularly pleased that two of the cases cited are concerned with language arts instruction.

This text is essentially an introduction to educational research and, in this reviewer's opinion, a much needed one. It does not try to answer all of the teacher's questions nor does it minimize the role of the specialist. Little reference is made to research design or to the analysis of statistical data. The text is intended to encourage educators to view research as an important part of successful teaching.

A New Guide to Children's Books

LARRICK, NANCY. *A Teacher's Guide to Children's Books*. Columbus, Ohio: Charles E. Merrill, 1960. Pp. 316. \$3.95.

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PALO ALTO

excitement! This reviewer would like to feel that thoughts such as these expressed by young people might have prompted Nancy Larrick to write her two eloquent guides to the delightful world of children's books. We can suspect that some children who develop an enviable life-time reading habit might in some way have reason to be grateful to Dr. Larrick.

This new text is the anticipated companion to her widely read and respected *A Parent's Guide to Children's Reading*, Garden City, New York: Doubleday and Company, Inc., 1958. \$2.95. As in her earlier work, this one has a very readable format introducing teachers to many books as well as to ideas on how to use them without giving one the feeling of being overwhelmed by titles and authors.

The interests of children and the books which meet their needs are identified year by year as boys and girls progress through school. This includes books to read aloud to young people as well as books to read on their own. The wide range of reading abilities which a teacher can expect in any classroom is effectively treated through references to Dr. Willard Olson's studies. As in her *Parent's Guide*, she merely gives thumbnail reviews and suggestions. However, many practical and creative ideas can be found under such topics as: "Bringing Children and Books Together," "Use of Children's Books in the Content Areas," "Creative Activities Naturally Spring from Children's Reading."

At least sixty pages of this text are devoted to an annotated bibliography of the favorite children's books. Most

of the books were published in recent years and are coded as "easy reading," "more difficult reading," or "advanced reading." Here is another fine list for librarians and teachers who are building useful collections in their schools.

A Book They Can Read

COOMBS, CHARLES. *Sabre Jet Ace*. Evanston, Illinois: Row, Peterson, 1959. Pp. 260. \$1.65.

It would be interesting to know how many young people have learned to read with the assistance of the popular American Adventure Series edited by Emmett Betts. The number would probably be surprisingly large and mostly boys. The fact that these action-packed biographies of interesting Americans, past and present, continue to head most high-interest but low-vocabulary book lists for retarded readers is indicative of the important role they have played in introducing slow starters to the wonderful world of books. This writer continues to hear secondary teachers who have been discouraged with the performances of their more reluctant readers exclaim after introducing this series, "These are books that they can and will read!"

Fortunately new titles are beginning to appear. The latest is the contemporary story of the adventures of Captain Joseph McConnel, Jr. Captain McConnel was the world's first triple jet ace who won fame and glory in the Korean War. Later, in 1954, he was killed testing a sabre jet plane. This is an exciting story with a readability level similar to *Buffalo Bill*, *Wild Bill Hickok*, and *Davey Crockett*.

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lisher for the American Adventure Series. Row, Peterson and Company purchased the Wheeler Publishing Company in the spring of 1960.

Books for Beginners

Teachers and librarians who have been on the look-out for creative stories written and illustrated expressly for beginning readers must be pleased with the I Can Read books published by Harper and Brothers, New York. In 1957 when *The Little Bear* appeared it was greeted most enthusiastically. However, the initial price, \$3.25, seemed high for a small book. With the addition of new titles, all in a 64-page format, they have been more realistically priced at \$1.95 each. The most recent stories in this series concern Julius, a very friendly gorilla; Oliver, an unwanted dancing elephant; and Harold, the boy who knows how to make clever use of a purple crayon. Children are certain to enjoy these splendid stories. Here is a list of all the titles:

- MINARIK, ELSE HOLMELUND —
The Little Bear, 1957
- No Fighting, No Biting, 1958
- Father Bear Comes Home, 1959
- HOFF, SYD —
Danny the Dinosaur, 1958
- Sammy the Seal*, 1959
- Julius*, 1960
- Oliver*, 1960
- CROCKETT, JOHNSON — *A Picture for Harold's Room*, 1960
- HURD, EDITH THATCHER — *Last One Home Is a Green Pig*, 1959
- STOLTZ, MARY — *Emmett's Pig*, 1959
- SELSAM, MILLICENT — *Seeds and More Seeds*, 1959

Triple S Study Formula

FARQUHAR, W. W., KRUMBOLTZ, J. D., and WRENN, C. G. *Learning to Study*. New York: Ronald Press, 1960. Pp. viii + 253. \$2.25.

There's much more material which merits attention in this 253-page paperback than one can condense into a few paragraphs. The authors describe faulty attitudes and habits in study, reasons and methods for eliminating these obstacles, and — best of all — dozens of techniques for improving study skills and habits.

Beginning with a device called "The Triple S Study Technique," the authors go on in short, self-contained chapters to discuss concentration, purpose, retention, examinations, note-making, vocabulary, and writing. The last chapter in particular ought to be helpful to teachers interested in getting better written reports from students involved in what the authors call "independent study."

The easy-going language, the conversational style, and the pertinent illustrations explaining the techniques should make this book attractive not only to college students but also to high school students who are interested in improvement. This reviewer is also finding the book very useful in teaching a high school course in study skills.
—DODD E. ROBERTS, *Oakland County, Michigan*.

A New Practical Text

DEBOER, JOHN J., and DALLMAN, MARTHA. *The Teaching of Reading*. New York: Henry Holt, 1960. Pp. 360. \$5.00.

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on the teaching of reading. Some are too wordy, others stress research at the expense of application (or vice versa), and a number are either too thoroughly complex for the beginning student or just a hodge-podge of chapters oriented to too broad an audience.

This book is *not*, however, one of the types just described. DeBoer and Dallman have done a good job of limiting content to their intended audience.

This practical text is an introduction to developmental reading instruction in the elementary school. In a simple and straightforward style the authors summarize current thinking and research and spell out implications for classroom practice. Recommendations are related to available research, and experimentation with new or variant procedures is encouraged. Motivation, instructional goals, and evaluation receive adequate attention. More stress should, however, have been placed upon the total organization of directed reading lessons.—RICHARD D. ELDER, *Eastern Michigan University*.

Another Multi-level Program

PARKER, DON H. *SRA Reading Laboratory IV A* (College Prep Edition), Chicago: Science Research Associates, 1960. \$54.50.

The College Prep Edition, the most recent addition to the growing family of multi-level reading laboratories, is designed especially for average, above average, and superior students in grades 9 through 12 who possess, at the least, eighth-grade reading ability. It is also planned as a developmental reading tool for college students who may have

missed guidance in reading at the high school level.

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In a recent effort to emphasize the development of greater efficiency in the performance skills of reading among high school juniors and seniors, the new laboratory was employed by this reviewer for classroom use following a five-week machine-centered program. The function of the laboratory was to maintain and extend the rates of reading developed during the intensive training course. The rate builders proved particularly well-suited to this purpose. Students remained conscious of their newly acquired rates of reading, combined with accuracy of understanding in using these minute timed selections.

The power builders, containing articles dealing with such topics as Jazz, Psychology, Biography, Economics, Science, and Ancient History, provided sufficient interest for the mature reader. Students expressed their enthusiasm for the materials.—ANTHONY P. WITHAM, *Genesee County, Michigan*.

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What Other Magazines Say About READING

BY

MURIEL POTTER LANGMAN

Eastern Michigan University and Hawthorn Center, Northville, Michigan

ANDERSON, LORENA A., and BENSON, EUNICE B. "Setting Up a Reading Clinic." *Peabody Journal of Education*, March, 1960.

This is a useful play-by-play description, with all details clearly set forth. It should be a source of information and comfort to the clinic planner.

ROBINSON, H. A., and DRAMER, D. S. "High School Reading, 1958." *Journal of Developmental Reading*, Winter, 1960.

This is the first of a series of annual summaries of professional literature on junior and senior high school reading.

PERRY, WILLIAM G., JR. "Students' Use and Misuse of Reading Skills. A Report to the Faculty." *Harvard Educational Review*, Summer, 1959.

This article describes and comments on ten years of experience with a college reading improvement program. There are some illuminating comments on research findings. For example, the writer observed that most students, even good readers, can learn to read better, but training in the mechanics of reading does not break old habits. Moreover, reading test scores from standardized tests do not indicate a student's ability to grasp meaning in long assignments. Perhaps the most perceptive and important comment is

that there are no general rules for teaching judgment in reading.

MANNING, LENA M. "Language Arts Must Meet Individual Needs." *High School Journal*, University of North Carolina Press, April, 1959.

This article advocates individualized teaching at high school level and provides many suggestions as to how it can be done. (This article is a little old for review, but it is too good to omit, and I missed it when it appeared.) "How-to" articles like this are badly needed at the high school level.

SCHOLL, GERALDINE T. "Reading and Spelling Achievement of a Group of English Children." *School of Education Bulletin*, University of Michigan, April, 1960.

The writer spent a year as a visiting lecturer at Sheffield (England) University. She took the opportunity to make a comparative study of the reading progress of English and American children, inspired by comments widely published in this country that the English children are "ahead."

Children in England are admitted to "infant school" at about the fifth birthday, and reading instruction begins at once. Hence if getting a "head start" is worth while in terms of reading progress, English children ought to be about a year advanced over Ameri-

can ones of the same chronological age. The experimenter studied a good-sized sample of children at four levels, ages seven, nine, eleven and thirteen, each sample with average intelligence as measured on English tests. The Stanford Achievement battery was used, with a few alterations to conform to English usage and spelling.

The scores for English children were slightly higher in Spelling and Word Meaning than American national norms, but they were lower in Paragraph Meaning, and the differences were "trivial." This study provides one response to Flesch's claims that English children have gained a reading year over ours by receiving instruction earlier.

EAMES, THOMAS H. "Some Neural and Glandular Bases of Learning." *Journal of Education*, Boston University, April, 1960. (Whole issue.)

This is a useful summary of recent thinking. It includes discussions of "specific reading disability," and of the relationship between laterality and speech and reading difficulties, as well as many other topics. There are some suggestions for teaching directionality.

WALLACH, M. A., ULRICH, D. N., and GRUNEBEAUM, MARGARET B. "Relationship of Family Disturbance to Cognitive Difficulties in a Learning-Problem Child." *Journal of Consulting Psychology*, August, 1960, Vol. 24, No. 4.

This description of a child with reading and other learning problems sounds so much like the children we all know that the discussion of the dynamics of this particular boy's difficulty may suggest possibilities for consideration and

evaluation of background factors in other cases.

MUEHL, SIEGMAR. "Effects of Visual Discrimination Pre-training on Learning to Read a Vocabulary List in Kindergarten Children." *Journal of Educational Psychology*, August, 1960, Vol. 51, No. 4.

This study was set up to attempt to answer the question of what types of sensory experiences facilitate visual discrimination among printed words for beginning readers. Since reading readiness workbooks abound in exercises intended to develop or improve word discrimination, the question is an important one. The experimenter found that pre-training in matching four words was found to be more effective in learning the same four words than pre-training in matching geometric forms or other words. Seems logical, somehow, but then perhaps the reading readiness material isn't so logical. Or perhaps individual differences and individual needs of children need more consideration here as everywhere else in teaching.

GRAHAM, FRANCES K., BERMAN, PHYLLIS W., and ERNHART, CLAIRE B. "Development in Pre-school Children of the Ability to Copy Forms." *Child Development*, June, 1960.

Studies in this area continue to appear because they have implications for the teaching of writing. This study demonstrates that efforts to copy become closer reproductions of the model with increasing age, as would be expected. The number of parts of the figure to be copied provides an important dimension of difficulty for the copier, the experimenters infer. It

would have been very useful to have this study continued up into the six-year-old range. Its subjects ranged from two and one-half to five years of age.

HALPIN, ANDREW W. "Muted Language." *School Review*, Spring, 1960.

This article is directed especially to school administrators, and it is full of suggestions worth considering by teachers who are interested in and concerned about relationships to their pupils and their peers. In one of the old films on remedial reading a teacher stands behind her desk and lectures to three seated junior high school students about their reading shortcomings; this always infuriated me and now this article provides some insights into the reasons. There is a stimulating bibliography.

MCVEY, MARCIA. "Reading Sure Is Fun Now." *Elementary English*, May, 1960.

Another useful description of the initiation and progress of an individualized reading program for sixth grade.

TUCKEY, JOHN S. "Seven Years of Acceleration," *Journal of Developmental Reading*, Summer, 1960.

This article is a summary of procedures and conclusions based on seven years of experience in teaching college developmental reading courses. Goals and achievements are viewed realistically. Resulting gains are genuine, but there are no extravagant claims. Particularly interesting is the writer's description of his orientation procedures, and the overcoming of different kinds of resistance to taking the sixteen-week course, for studies have shown the importance of proper attitudes for gains in college reading improvement

courses. Group gains for students under twenty-five years of age were about 300 words per minute, for those over twenty-five about 200 words per minute.

BOOTH, WAYNE C. "Lady Chatterley's Lover and the Tachistoscope," *Journal of Developmental Reading*, Summer, 1960.

Wry, cumulatively uproarious comment on the claims to success of programs to accelerate reading speed. Quite different from our usual recommended reading, it presents a riotously unusual case study, with surprising implications, to say the least.

MAZURKIEWICZ, ALBERT J. "Social-Cultural Influences and Reading." *Journal of Developmental Reading*, Summer, 1960.

The preponderance of boys in the group of retarded readers at every age has puzzled workers for thirty years. The writer of this article conducted a study of the attitudes of boys and girls toward reading. He found that, by using a specially developed inventory of activities which were to be classified as predominantly masculine or feminine, he obtained material indicating the existence of a previously hypothesized stereotype of reading as a feminine activity.

Using the activity inventory, a study was first conducted among thirty male university faculty members, and also among boys and girls in a summer developmental reading course at the university. In both groups the majority classified reading as a feminine activity. Then the final form of the inventory was administered to 374 male students in the eleventh grade in a Pennsylvania

city, along with a group test of mental maturity and a reading test. The fathers of these subjects were asked to cooperate by filling out the inventory without consulting their sons. The final group, for whom information and tests were complete, numbered 157.

These eleventh graders responded in the same way as the pilot subjects. The great majority classified reading as a feminine activity. So did their fathers. More sons than fathers held this opinion, but there was a substantial majority in each group. The correlation between opinions of fathers and sons was positive, but low.

Boys who classify reading as feminine tend to be *slightly* less able in reading than those who classify it as masculine. In comparison of attitudes

of the subjects in two different high school curriculums, it was found that the attitudes of vocational curriculum students seemed to be more like their fathers with regard to the M or F classification of reading than did attitudes of those in the academic curriculum.

The experimenter comments that if reading is considered a feminine activity it is in opposition to the stereotype of the "real boy." If this attitude persists after eleven grades of exposure to reading activities for both boys and girls, it would be well to find out how powerful it is in the early years of the elementary school. Observers have already found it in existence there. Here is another study awaiting the experimenter.

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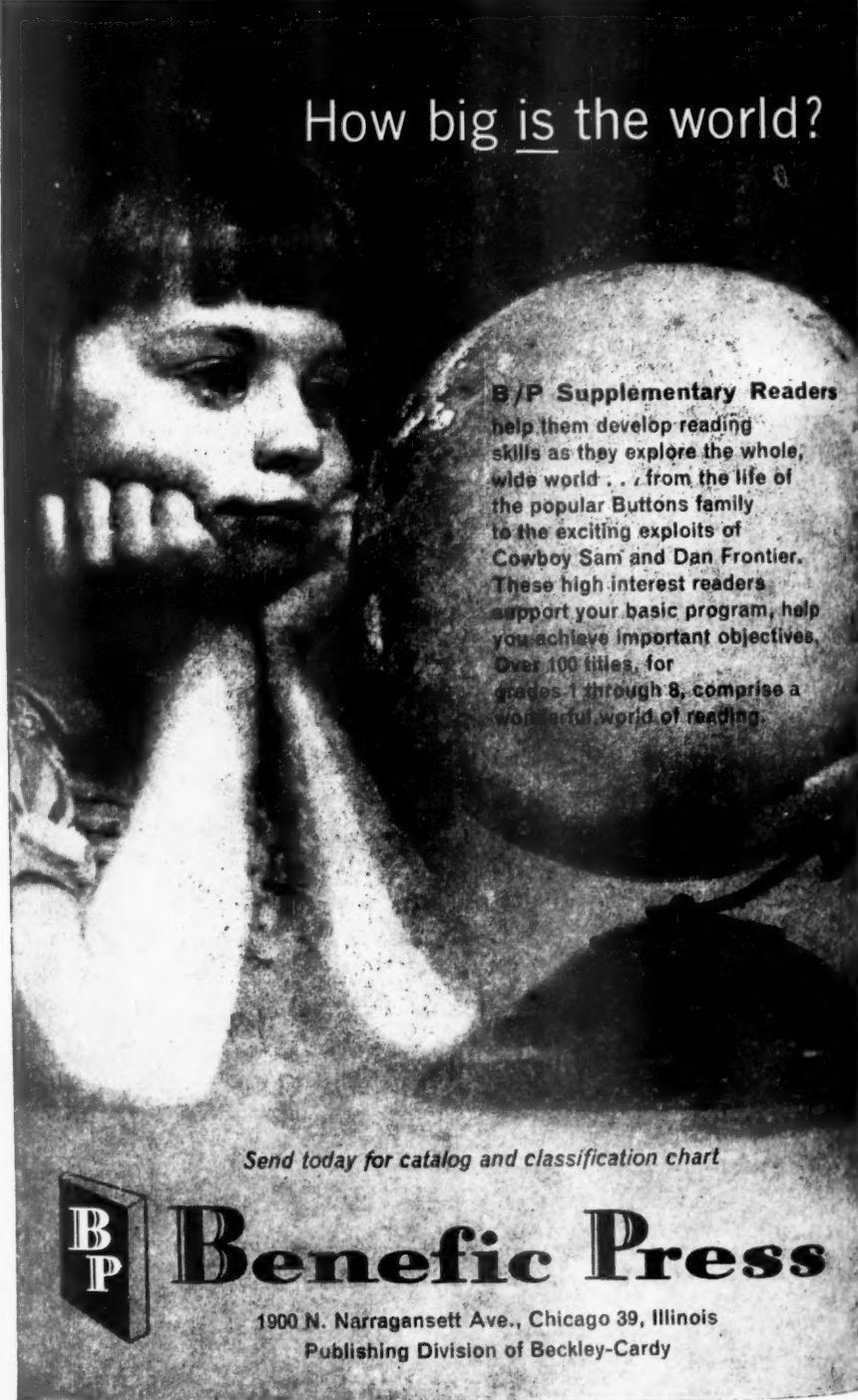
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PRESIDENT'S REPORT

BY

MARY C. AUSTIN

President, International Reading Association

SADDENED BY the loss of an "irreplaceable pilot," your IRA Board paid special tribute to Dr. William S. Gray at its October meeting in these words:

"It is with a sense of profound loss that the officers and board of directors of the IRA observe the death of William S. Gray. Dr. Gray was a key figure in the creation of the IRA and was its first president. In the years following his term of office he continued to devote his energies to the development of this organization which he had helped to found.

"His role as pre-eminent spokesman for the field of reading, as well as his distinguished career in the broader field of education, inspired several generations of students and colleagues. We know that in the affairs of the IRA Dr. Gray's influences will continue to guide us. We hope that whatever this organization achieves in the future will be, as it has been in the past, a tribute to his wise and vigorous leadership."

"*Changing Concepts of Reading Instruction*" was chosen as the theme of the Sixth Annual Conference to be held in St. Louis on Friday and Saturday, May 5 and 6, 1961. Friday sessions will be devoted to major addresses related to the theme, while the Saturday meetings will focus

attention upon "Significant Issues in Reading."

Two preconference institutes were approved by the Board for Thursday, May 4. Attendance at the institutes will again be limited this year, but classroom and clinic visits in St. Louis will also be scheduled on Thursday for those who wish to participate in these activities.

Early in January a preliminary program with hotel reservation and preconference registration information will be mailed to each IRA member. We urge you to make reservations promptly, and to plan now to have your council represented at the Annual Assembly Meeting on Thursday evening at the Sheraton-Jefferson Hotel in St. Louis. Council presidents and state organization chairmen will enjoy special breakfasts at which Dr. LaVerne Strong, Chairman of the Organization Committee, will preside on Friday and Saturday mornings.

Suggestions for nominations for president-elect and board members will be welcomed by Dr. George Spache, Chairman of the Elections Committee, University of Florida, Gainesville, Florida. Statements of the qualifications possessed by your nominees should accompany your letter to Dr. Spache.

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THE CLIP SHEET

Mary Elisabeth Coleman
University of Pennsylvania

What Are "Classics?"

What criteria should we use in determining the quality of reading material we offer our students? The secondary teacher of reading will find a discussion by G. Robert Carlsen a good basis for self-evaluation of philosophy. In "Conflicting Assumptions in the Teaching of English" in the *English Journal* of September, 1960, Dr. Carlsen parallels basic assumptions of the traditional teacher and of the modernist. You will probably find, as I did, that you do not fall neatly into one category or the other. Just trying to decide where you agree or disagree with these assumptions, however, can be challenging.

To Reach Readers

If you have worn out your copy of *Good Reading for Poor Readers* you will be happy to know that Dr. Spache has brought the publication up to date. I find that most remedial reading teachers have made good use of the book, but many classroom teachers do not know about it. This book should be in the professional library of each elementary school for ready reference by the teachers. It is a source of titles of books for pupils whose interest is at a more mature level than their reading ability. The first part of the book discusses the factors which influence reading inter-

est, a background of knowledge which the classroom teacher certainly needs. George B. Spache. *Good Reading for Poor Readers*. The Garrard Press, 510 North Hickory St., Champaign, Ill. \$2.50.

Those blasé secondary students who are indifferent to their need for improvement in reading skills may be reached through the use of films. "Pathways to Reading" develops various aspects of reading, with material at the fourth-grade level of difficulty. "Keys to Reading" emphasizes getting the meaning of words, phrases, sentences, and paragraphs. Descriptive pamphlets are available from C-B Educational Films, Inc., 690 Market St., San Francisco 4, Calif.

Many teachers have enticed reluctant readers by appealing to an avid interest. A good book in a popular sports field may appeal to some of your book-avoiders. A list of books, fiction and non-fiction, compiled by Donald N. Bentz is arranged under the following headings: Boxing; Golf; Hockey; Judo, Wrestling, Body-Building; Sports Cars and Racing; Swimming — Skin-Diving; Tennis; Track and Field. "Sports Books, Grade Seven Up," *Junior Libraries*, 6 (Nov., 1959), 11-13.

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informational materials to meet the range of reading abilities in your class, don't overlook the magazines put out by corporations for promotional purposes. These are sources of pictures, reading material, diagrams, and graphs for your files. Louise G. Williams, Librarian at the Ben Davis High School in Indianapolis, has given an annotated list of the magazines she has found valuable in "Free Magazines for Vertical File Material," *Junior Libraries*, 5 (Feb., 1959), 14-15.

The sixth annual list by John R. Searles, "More Sources of Free and Inexpensive Materials" is available from the National Council of Teachers of English, 508 South 6th St., Champaign, Ill. The list includes pamphlets, paper backed books, catalogs, reprints, film strips, and recordings. Single copies, \$0.20.

Reading Conference

Perhaps it's the recent interest in academic excellence that has stimulated teachers to a greater concern about reading in the content areas. The Third Annual Reading Conference at Syracuse University is responding to this concern in its theme "Reading for Information (In the Content Subject)." The conference will be held June 26-30, 1961, at the University.

Recommended Reading

The second revised edition of *Children's Books Too Good to Miss* omits the books which were listed in the previous edition but are no longer offered for sale. The list adds titles of

fifty books which have been published since the 1953 edition. The books are grouped by readers' ages and are briefly described. May Hill Arbuthnot, Margaret Mary Clark, Edna Marguerite Horrocks and Harriet Geneva Long. *Children's Books Too Good to Miss*. Second Revised Edition. Cleveland: The Press of Western Reserve University, 1959. \$1.25.

The 1960 edition of "Growing Up With Books" is good to distribute at a PTA meeting. This small booklet has annotated listings of about two hundred and fifty children's books, both old favorites and newer books of quality. The publisher and price are given for each book. Parents should have a copy in their hands before they start Christmas buying. R. R. Bowker Company, 62 West 45th St., New York City 36. \$3.35 for 100 copies.

The 1960 edition of *Best Books for Children* lists 3,300 of the best children's books in print. The titles are arranged by grade and by subject. Each entry has a brief description, the correct price, and notations indicating whether the book was recommended by the American Library Association, the *Children's Catalog*, the *Library Journal* or other sources. The publication is indexed by author, title, and by illustrator. R. R. Bowker Company, 62 West 45th St., New York City 36. \$2.00.

The 1960-61 annotated *Reader's Choice* book list includes more than 500 of the best paper bound books for elementary, junior, and senior high school use. For a catalog, write

to Reader's Choice, 33 West 42nd St., New York City 36.

Content Reading

Reading teachers and coordinators at the secondary school level can frequently get help from the teachers in subject areas in selecting appropriate and recent reading material. The publications of the various associations devoted to teaching particular subjects frequently have up-to-date bibliographies of books for students. For example, the *Elementary School Science Bulletin*, publication of the Elementary Science Committee of the National Science

Teachers Association, in its column "Timely Tips for Teachers" periodically lists new books in the area of science. Usually a brief annotation is included and the appropriate age level in interest and reading difficulty is indicated.

More Readers?

According to the American Publishers' Council the dollar sales of hard cover trade books in the United States in 1959 showed a notable increase over the sales average for 1955-57. Adult book sales increased 34 per cent; juvenile book sales increased 30 per cent.

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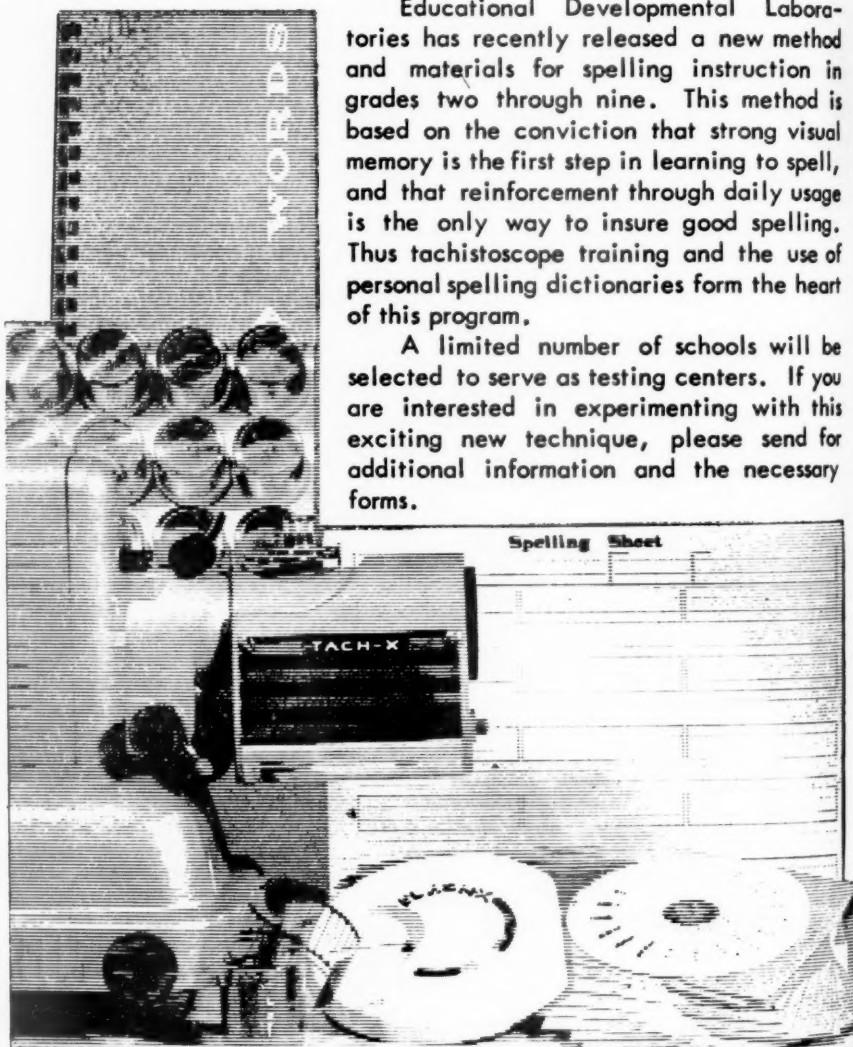
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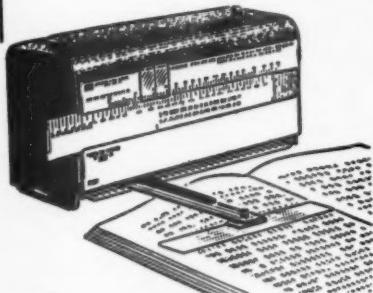
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